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A Comparative Study of the Educational Systems of India and the United States

Jarugula Subba Rao
University of Nebraska at Omaha

A COMPARATIVE STUDY OF THE EDUCATIONAL SYSTEMS OF INDIA AND THE UNITED STATES

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Specialist in Education

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by

Jarugula Subba Rao

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ProQuest LLC.
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 - 1346

Accepted for the faculty of The Graduate College of the University of Nebraska at Omaha, in partial fulfillment of the requirements for the degree Specialist in Education.

Graduate Committee Leo Levy Educ
Eugene H. Freund Ed

Darrell Kellams Ed. Ad.
Chairman

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CHAPTER I

INTRODUCTION

Statement of the Problem

The problem undertaken in this research is a comparative study of the educational systems of India and the United States.

The Importance of the Study

To understand any system of education one must understand the people who created it: their land, history and culture. Each system of education is a reflection of its own culture. It is dangerous to generalize concerning any system of education without an exhaustive understanding of its culture. While problems appear much the same in other countries, the answers that are worked out in response to them often differ widely. Each country develops the type of educational system that will best meet its needs as it sees them. Because of differences in historical background, economic and social conditions and points of view, no country could adopt the school system of any other. Nevertheless, the struggles and successes of other school systems can teach educators much that will be helpful in the solution of their own problems.

The study of educational systems of other nations and their successes and failures can point the way to a better understanding of one's own national system. Above all, the comparative study of education can bring the realization that educational dilemmas, wherever they occur, are not exclusively national. The comparison brings into sharp focus the similarities and differences between systems of education and

provides a stimulus to thought in preparing plans for the future development of education programs. The study that is undertaken in this field project will reveal that no educational system is static.

Educational institutions are constantly undergoing transformation and while change does not necessarily mean progress, there can be no progress without change. In today's rapidly changing world, there is the certainty that yesterday's educational institutions will not meet contemporary or future needs. Education today is forced to pick and choose in the establishment of priorities. Subjects are taught that were often unknown a generation ago. Today the mass of facts in any important area of learning grows overnight and new subject disciplines emerge. Hence, there is a need for comparative studies to bring knowledge up to date and ultimately to promote international understanding and cooperation.

Definition of Terms and Abbreviations

Throughout the research study most of the terms used are commonly known to educators in the field. A comparative study generally refers to research in which two or more cases or groups are compared. For the purposes of this project, the educational systems of India and the United States are compared.

Limitations of the Study

The study has been delimited as follows:

1. To present comprehensively an overview of the educational systems of India and the United States.
2. To compare and contrast in summary form the following aspects in India and the United States:
    a. Curriculum

b. Financing

c. Preparation of teacher education

d. Organization of education

Research Procedures

Research procedures include most of the approaches employed by the comparative educators:

1. Historical, philosophical, societal and cultural viewpoints resulting in a comprehensive study of educational systems in India and the United States.
2. An extended review of literature in the field.
3. Interviews with selected school administrators (See Appendix 1).
4. Spot studies for observation include study of ten school practices (See Appendix 1).

Organization of the Study

After all data had been collected, it was organized in chronological order. This is essentially the same order used in the presentation of this study. Chapter I, INTRODUCTION, presents the statement of the problem, need for and importance of the study, definition of terms, limitations of the study, research procedures or methodology and organization of Chapters.

Chapters II and III are devoted respectively to a comprehensive study of education in India and the United States from historical, philosophical, societal and cultural viewpoints; Chapters IV and V describe in detail the school curricula, financing of education, preparation of teachers and organization of education in both India and the United States; and Chapter VI is devoted to conclusions developed from the comparison.

The reader should be cautioned that this study is not to be regarded as an in depth evaluation, but rather a broad comparison of Indian and American educational systems. In doing this study, it was the desire of the researcher to become acquainted with both school systems in a comprehensive way. Due to the shortage of time the researcher could accomplish only a surface study of both countries.

CHAPTER II

EDUCATION IN INDIA

This chapter is devoted to a comprehensive study of education in India from historical, philosophical, societal and cultural viewpoints.

Land and People

India's growth and development as a civilization have been influenced by such long-range factors as her land, which is divided into three great regions: The Himalayan area, the northern river plains and the southern tableland. The mountain region of the north extends from the Hindu-Kush through the Himalayas over into the mountain ranges of Southeast Asia. The mountains have been penetrated by invaders chiefly through the northwest frontier's Khyber and Bolan Passes. Through these passes the Indo-Europeans migrated to drive back the original Dravidian inhabitants beyond the Satpura and the Kindhya Mountain Ranges, which border the region of the Deccan Plateau of the south. Thereafter, the Satpura line has marked a cultural division between the languages and racial types of the Indo-European North and the Dravidian South. Between these two regions lies the Indo-Gangetic Plain, stretching from the lowlands of the Ganges Delta to Delhi and then through the Indus Valley and the Thar Desert of the Arabian Sea.

The climate of India is in general a monsoon type with alternating rainy and dry seasons, but temperature varies greatly from the cold mountain ranges of the north to the subtropical lands of the

center and south.[1] India's population is seventy-five percent agricultural and lives mainly in rural areas. Indians speak fourteen main languages and hundreds of dialects. The population of India is now about 565 million and less than half of it is below the age of 18 years. By 2000 the population of India is likely to increase to one billion. The total number of educational institutions in the country is over 500,000. The number of teachers exceeds 2 million. Hindi, the official language, is spoken by about 45% of the people. English is also spoken. Some 84% of the people are Hindus, 11% Muslims, and the remainder are Christians, Sikhs, Buddhists, Jains and Parsis.

Historical Development

Long before Europeans came to India, Indian culture had developed to an advanced stage in every field except the technological. In seeking to understand contemporary India, then, one must come to know Ancient India, its religious and literary traditions, its scholastic contributions and the ethnic and other factors that have made for social diversity and unity in modern India.

Ancient Historical Traditions. India is one of the few countries in the world whose continuity of cultural tradition can be traced back to about 2000 B.C.

During the "period of growth" of the Indic Civilization, roughly 1300-700 B.C., the great philosophic and religious Vedic literature of India was born. The four main collections of writings which make

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[1] A. H. Moehlman, Comparative Educational Systems (New York: The Centre for Applied Research in Education, Inc., 1968), p. 52.

up the Vedas are: (1) the Rigveda--"a collection of hymns that were chanted or recited by the priests at the sacrifices," (2) the Samaveda--"a collection of the melodies for chants," (3) the Yajurveda--"a series of prescriptions or directions for performing the sacrifices," and (4) the Atharveda--"less sacerdotal than the other three, being a prayer book for the simple folk."[2]

Vedic hymnals gave rise to ritualistic interpretations termed "Brahamanas" and Aranyakas" which later led to symbolic and philosophic interpretations called "Upanishads." The speculative treatise of the Upanishads are concerned mainly with a "mystical interpretation of the Vedic ritual and its relation to man and the universe."[3] In addition to the Vedas and the Upanishads, two epics of gigantic scope and dimension should be mentioned--the Mahabharata, called the longest poem in the world, and the Ramayana. These epics, which often are compared to the Iliad and Odyssey of Ancient Greece, embody the essential Vedic philosophy in a form which has had great popularity among the Indian people through the centuries. For people denied the knowledge of the written word, the Mahabharata and Ramayana contribute greatly to the development of a rich oral heritage, particularly in Upanishads, in which the basic precepts of what is known as Hinduism are given.

Hindus historically have regarded the Vedas as a body of revealed and absolute truths, and the authority of these revelations is still recognized by a great majority of Hindus today. Hinduism for over two

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[2] Edward F. Myers, Education in the Perspective of History (New York: Harper & Row, 1960), p. 49.

[3] Wm. Theodore de Bary, ed., Sources of Indian Tradition (New York: Columbia, 1958), p. 5.

millennia has been a way of life, with social, economic and political as well as religious implications for the majority of the Indian people. Hinduism has tended to produce a society tinged with fatalism in which the status of the individual is considered the result of his behaviour in previous lives and any attempt on his part to achieve higher status is looked upon as a deterrent to his soul's progress. The importance of meditation and the ultimate goal of achieving a state in which human and material concerns are of no consequence have tended to produce a people characterized by many observers as being other worldly rather than materialistic and as being more contemplative than active.

The Caste System has been one of the major divisive forces in Indian society. Out of the societal divisions emerged four major castes. Traditionally, the Brahmans, the spiritual leaders, were the most revered and following them in descending order were the Kshatriyas, men of war and politics; the Vaisyas, the trademen; and the Sudras, or Serfs. Within these four major castes there developed numerous smaller castes and subcastes created by the continued incorporation of successive invaders, trade guilds, religious groups, interracial groups and even groups of dissenters against the system. Each caste was hereditary and endogamous and responsible for its internal affairs as well as the contacts of its members with other castes.

As a means of maintaining the individuality of a multitude of cultures within one stable society, the caste system has been referred to as the "Supreme expression of the genius of the Indian civilization"[4]; however, at the same time it must be considered an extremely powerful

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[4] Amaury de Riencourt, The Soul of India (New York: Harper & Row, 1960), p. 97.

deterrent to both the individual aspirations of mobility and national goals of development.

Along with the caste system, the extended family and the village community have been looked upon as supporting pillars of Indian society. The extended family included father, sons, grandsons, and their respective womenfolk who historically shared estate, income, food and worship. The entire family also functioned as a united group in the religious observances of its caste, in large economic enterprises, and in protecting and regulating the social affairs of its members.

The village which forms the third pillar of Indian society likewise developed in Ancient India and combined families of the several castes into semi-independent and self-sufficient units which are still the centre of the lives of the rural population of contemporary India. Traditionally, the affairs of the village unit were directed by a council composed of the heads of families, the local headmen of the castes and other particularly influential men of the community. Major decisions involving the entire village were made and implemented through this council, and frequently it acted along with the family or caste to regulate undesirable behaviour of individuals of groups within the community. The villages of India have frequently been characterized as essentially democratic units because of the representative nature of the village council and its reliance on persuasion rather than force whenever possible. Furthermore, the villages provided India with another effective structure of societal stability.

Education in Ancient India. Education in Ancient India was regarded as a sacred mission and the rulers deemed it their duty to protect the educational institutions known as "Ashramas" where

deep learning used to be administered. Education, being governed by a Hindu ideal, concentrated on the development of self discipline and religious knowledge which would aid in attaining the spiritual goal and, in effect, amounted to a spiritual birth--in contrast to physical birth. Although a highly literary flavour permeated the curriculum, specific attention was given to the role which the student as a caste member would play in society. Thus, military science and economics, the arts of war and commerce, might be taught for those who would have future need of them. This latter, more practical consideration of the curriculum was also based on Hindu philosophy which dictated that man could only achieve his spiritual goal by performing his task in the present life to the best of his ability. By the fourth century B.C., Taxila and Benares Universities had gained renown as great centres of learning and were attended by students from all over Asia. In addition to advanced religious studies, there were sports activities, military and medical institutes, and departments in economics, botany, philosophy and possibly astronomy. Thus, education in effect supplemented military prowess to ensure Aryan domination over the various non-Aryan peoples.

Impact of Buddhism and Islam. The teachings of Buddha as the Ahimsa or love and nonviolence toward all living things spread throughout India and remained a vital religious force up to the twelfth century and then was absorbed into the mainstream of Hinduism. Buddhism as a separate religion lives on as a force in the lives of millions of people in Asia.

The Moslems began their invasion of India in the tenth century A.D., but not until the end of the seventeenth century did the sword of Islam

succeed in uniting briefly the entire subcontinent under one ruler, owing largely to the influence of Islam, which was as much an all-encompassing way of life as was Hinduism. The Moslems, in contrast to previous invaders of India, refused to be absorbed by the Hindu-dominated society. While attempts by Hindu and Moslem leaders to create a synthesis of these two great religions met with little success, they did serve to enrich greatly the native vernacular literature. An aesthetic synthesis of the two cultures created profoundly beautiful works of art, particularly of architecture--Taj Mahal. One of the major gifts of India to the world occurred during this period, with the creation and transmission of the Indian numerals, including the zero or Sunya, which became known as the Arabic Numerals of positional mathematics.

During the later Moslem period, especially during the Mogul Empire (1526-1707), India became once again a centre of scholarship and literary creativity. The centres of Moslem educational as well as civil and ecclesiastical activities were the Mosques. Here in the Maktabs (primary schools) and Madrasas (high schools or colleges) children learned to memorize and recite the revealed truths of the Koran, acquired some grammatical skills and achieved some knowledge of arithmetic. Lectures on literary and religious topics were held at the Mosques and great collections of books were stored in them. In addition, certain academies or universities, which it is said some Hindus attended, were established in all Moslem lands to promote advanced learning.

Although neither Moslem nor Hindu rulers had established a state educational system, both groups considered the support of education a religious obligation. Royal patrons supported scholarship through

direct donations to institutions and by providing patronage to distinguished poets, artists and musicians. Both Moslems and Hindus gave social prestige to the art of teaching, and stories are told of mighty military and political leaders paying homage to humble teachers. The goals of Indian education, as of life itself, were sacral rather than secular and offered few visions of new philosophical or material frontiers to challenge man's efforts.

Anglicization of Education. The riches of India acted as a dazzling magnet to attract adventurous European traders. From the end of the fifteenth century, the perilous ventures of enterprising individuals gave way to large scale operations conducted by trading companies of the Portuguese, Dutch, French and British. By the middle of the eighteenth century, the British East India Company, founded in 1600, had succeeded in eliminating its rivals from the subcontinent. By mid-nineteenth century, when India passed from the authority of the East India Company into the control of the British Government, the entire subcontinent was administered either directly by British representatives or indirectly through subsidiary treaties with the rulers of the protected princely states. It was the main objective of Britishers to develop India as a source for raw materials and a market for England's growing industrial economy. The British were cautious about interfering with the social customs of the Indians, but British ideas and ideals nevertheless reigned supreme in economic and political affairs.

The policy of the British East India Company did not originally allow it to become involved extensively in the development of Indian

institutions; western educational ideas were introduced by European missionaries. One of the directors of the East India Company stated:

> We have lost America from our folly, in having allowed the establishment of schools and colleges, and that it would not do for us to repeat the same act of folly in regard to India and if the natives required anything in the way of education, they must come to England for it.[5]

Arthur Howell, the famous British historian, remarks:

> Education in India under the British Government was first ignored, then violently and successfully opposed, then conducted on a system now universally admitted to be erroneous and finally placed on its present footing.[6]

1813-1902: A Period of Neglect. The modern system of education in India originated with the Charter Act of 1813 under which the East India Company accepted the responsibility for Indian people. During this period, compulsory education was ruled out to Indians by the officials of the British East India Company who accepted the responsibility for the education of Indian people as utterly impracticable on account of financial and administrative difficulties.

The orientalists or classicists, as they sometimes were called, held that education should emphasize India's cultural heritage through the medium of Sanskrit for Hindus and Arabic for Moslems. Otherwise, the group argued, although it was not entirely unified in its views, India would be cut off from its glorious past. Such western learning was of value and could be taught through the classical languages; thus a synthesis of Western and Eastern cultures could be effected. The Anglicists advocated the use of English as a

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5 S. N. Mukerji, History of Education in India (Baroda, India: Acharya Book Depot, 1951), p. 32.

6 A. P. Howell, Education in British India (Government Printing, 1872), p. 1.

medium of instruction and western learning in general as the best route for Indian progress. Both sides agreed that the great mass of people should be educated in the vernacular and although one group urged that the vernacular be used at all levels of education, the main point of debate centered on the content and language of instruction in higher education. It was Rommohan Roy's belief that through English education and its concern with science and rational thought, India could enter into a new period of enlightenment.

The decisive blow to the orientalists' hopes was struck by Lord Macauley, argued in his famous "Minute on Education" in favor of western education which would:

> . . . form a class of persons, Indian in blood and colour and English in taste, in opinions, in morals and in intellect. To that class we may leave it to refine the vernacular dialects of the Country, to enrich those dialects with terms of science borrowed from the Western nomenclature and to render them by degrees fit vehicles for conveying knowledge to the great mass of the Indian population.[7]

1902-1918: A Period of Intensive Agitation. Owing to the rising tide of Nationalist opinion, intensive attempts were made during this period to induce government to enact a law for compulsory education. Lord Curzon, the then Governor General, took the lead in this matter and during his term of office sanctioned large recurring and non-recurring grants for the promotion of education.

1918-1950: A Period of Experimentation. Following World War I, two important changes took place: the Indianization of educational services and the transfer of the education departments to popular control.

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[7] de Bary, pp. 471-474.

The most dramatic of the changes in the pre-independence period was the progress in Moslem school enrollments. Siqueira beautifully summarizes British educational policy in India as:

> It mainly consisted in copying English schemes with a loyalty worthy of a better cause. English education was a novelty and it was the way to safe and honourable employment under the rulers. It was an imported article and the men who could handle it were imported too. The history of British rule shows director after director trying to introduce into his province methods and ideals he had seen used in his youth in England and often advocating systems which had already been tried and discarded in his own country. When the system of payment by results had failed in England, it was warmly recommended here; when residential universities were England's greatest contribution to educational history, affiliating universities were started in India; when the Montessori system is everywhere established for pre-primary education in Europe, it is still being discussed here.[8]

In brief, education in the pre-independence days was confined to limited objectives of educating selected people and not the masses. It was not conceived to develop an informed Democracy or to meet the national needs and goals. There was no attempt to universalize education, provide freedom to teachers and schools to experiment with new ideas or launch programs of improvement. The methods of teaching were formal. Syllabi were prepared and prescribed by the State and teachers had no freedom to change them. Immediate attention was paid to the proper development of education with the dawn of independence.

As nationalism grew, reflecting a strong religious influence, the gap between Hindus and Moslems widened in spite of several attempts at conciliation. The story of India's progress toward independence

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[8] T. N. Siqueira, Modern Education in India (London: Oxford University Press, 1960), p. 265.

in the first half of the twentieth century is a story of conflict between the Hindus and Moslems, a conflict at times encouraged by the British and a story of flux due to the two World Wars and their effects. In this period, two men stand above all other dedicated leaders--Rabindranath Tagore and Mahatma Gandhi. Tagore, Nobel Laureate, wanted freedom for India, but also freedom from poverty, the growing Moslem-Hindu conflict, the caste system and other social and religious as well as political restraints. His greatest expression was his spiritually charged poetry which opened the heart of India to the world. Seeing India's spiritualism as complementary to the materialism of the West, Tagore established a college at Shantineketan dedicated to the rebirth of Indian culture and world brotherhood. This school, which emphasized learning through contact and communion with nature, became a model for later Hindu educational institutions.

In contrast to Tagore, Gandhi's great drive was toward political independence. His method included great social reforms which for the first time brought the masses into active participation in the movement. Nationalism and independence had previously been primarily the concern of the small group of Western educated intellectuals. Through Gandhi's personality, example and doctrine of passive resistance, they became the concern of India. Gandhi showed the people their power and urged them to return to their crafts in order to help themselves overcome their many problems rather than waiting for outside force to bring them relief. The success which he had in influencing the people of India, plus the untiring work of the Indian Congress and the Moslem League and the increasing unpopularity

of Colonialism in the world, resulted finally in independence and partition for India. On Midnight, August 14, 1947, Pakistan and India became two free nations.

1950-Contemporary: A Period of Reorientation and Expansion.

On the attainment of political independence in 1947, India was faced with the task of remodeling and vastly expanding her system of education in the National interest. The Union of India was designed as a Republic dedicated to the concept of progress through democracy.

The first and most important trend of the post-independence period has been the emphasis on providing the extensive facilities for the rapid expansion of education. Education is the responsibility of the individual states and varies accordingly.

Article 45 of the Constitution of the Union of India states that:

> The State shall endeavor to provide within a period of ten years from the commencement of this Constitution free and compulsory education for all children until they complete the age of 14.

This Constitution direction has not yet been fulfilled and the Education Commission (1966) has observed:

> We believe that the provision of free and universal education for every child is an educational objective of the highest priority not only on grounds of social justice and democracy but also for raising the competence of the average worker and for increasing national productivity.[9]

Problems in Indian Education

Economic, Social and Political Problems. In spite of her

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[9] Government of India, Ministry of Education, Education Commission Report, 1964-1966 (New Delhi, 1966), p. 6.

extensive problems, India has made progress through the Series of Five Year Plans (1951-1966), which have given the Government the opportunity to contribute markedly to economic, technological, social and educational advance. India's most acute problem is overpopulation. At the present rate of growth, it has been estimated that the population will exceed one billion by the year 2000. In 1965 the Indian Government began a vigorous campaign to check this tremendous population growth. Public and private agencies have been set up throughout India to encourage and provide means for widespread adoption of family-planning techniques.

The majority of the people in India suffer extreme poverty. Agriculture is the basis of the economy. After several bad crop years, food production is now showing an upward trend as a result of favorable weather conditions and wider use of improved seed, fertilizer, and irrigation. Poor food distribution, inflation and population continue to make India's food situation far from satisfactory. By 1969, however, there were indications that an economic recovery had begun.

O. K. Ghosh has pointed out that the Indic-Hindu societal pattern has been "Emotional, mystic, aesthetic, collectivistic, aristocratic, easygoing and conservative."[10] These characteristics obviously conflict with the scientific, materialistic, aggressive pattern which is usually associated with rapid economic and social growth.

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[10] O. K. Ghosh, Problems of Economic Planning in India (Allahabad: Kitabistan, 1957), p. 21.

India, a parliamentary democracy, is a union of eighteen states and ten union territories. At least five major social and political problems face India in its struggle for development. The first of these concerns the very existence of a unified India with religious differences. The second problem which thwarted rapid unity was the lack of a national language. English was well known to the educated elite who occupied high governmental, professional and commercial positions, but it was practically unknown among the masses where the regional vernaculars remained strong. Acknowledging the need for a national language for political as well as economic and social reasons, Hindi was considered as a national language. Opposition to Hindi has been particularly strong in the southern part of the nation.

Social cleavages in the new nation resulting from the traditions of caste posed a third problem which had economic and social dimensions. Financial and other rewards assisted in removing the economic defects of the caste society, but the inherent social evils are disappearing slowly. Social mobility, while on the increase, was still limited in the highly divisive Indian society. Constitution promises no discrimination on the basis of colour, race, caste or sex; the age-old prejudices are dying slowly.

A fourth condition affecting social and political development, one which does not lend itself to easy or brief description, has been the attitude of Indian people toward the process of change. A final problem, related to the foregoing, is concerned with defining the political character of the new nation and giving leadership to it. Gandhi and Nehru tried to bring unity out of diversity and stimulate greater national effort.

Pre-primary Education. Pre-primary education is provided to children from $2\frac{1}{2}$ to 6 years of age, with the explicit purpose of helping their physical, intellectual, emotional and social development. In short, as an official committee has remarked:

> There is nothing like a national policy in regard to preprimary education and that due to paucity of funds, expansion of preprimary education has been left mainly to voluntary organizations.[11]

Primary Education. Five to six years generally cover the primary course in the urban schools. With the introduction of basic system of education (precious gift given to Modern India by Gandhi, the Father of the Nation) as the national pattern at the elementary level by the government, however, it is intended that the elementary stage should consist of an integrated course of eight years to cover the 6-14 age group.

Education in Eighteen Years of Freedom, published by the Ministry of Education in 1965, has observed:

> Basic education aims at improving the traditional system by collating learning with physical and social environment of the child and craft activity work in the school is organized to inculcate right habits of work, a spirit of cooperation, self help, dignity of labor and other desirable traits so that on growing up the child would become a useful member of the society and contribute toward the progress and welfare of the community. Basic education has been accepted as the national pattern of education at the elementary stage. Ultimately, all schools are to be converted to this pattern.[12]

Dedicated to the major task of relating education to national development, the Education Commission (1966) has examined in great detail the

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[11] Estimates Committee, Report of the Committee, Elementary Education (New Delhi: Delhi Loksabha Secretariat, 1958), p. 5.

[12] Government of India, Ministry of Education, Education in Eighteen Years of Freedom (New Delhi, 1965), p. 19.

problems of school education. Referring to basic education the Commission has observed:

> We believe that the essential elements of the system are fundamentally sound and that with necessary modifications, these can form a part of education not only at the primary stage but at all stages in our national system. These elements are (1) Productive activity in education; (2) Correlation of the curriculum with the productive activity and the physical and social environment; and (3) Intimate contact between the school and the local community.[13]

The following is a list of subjects for basic schools as recommended by the Union Ministry of Education:

1. Craft
   a. Spinning and Weaving
   b. Gardening leading to agriculture
   c. Book craft including paper and cardboard work leading to wood and metal work
   d. Leather work
   e. Clay work and pottery
   f. Fisheries
   g. House craft
2. Mother tongue
3. Social Studies
4. Mathematics
5. General Science
6. Art including drawing, music and aesthetics generally
7. Hindi
8. Games and physical activities

A recent systematic survey (NIE-HEW Project) conducted by the Department of Educational Administration, National Council of Educational Research and Training (NCERT) Government of India, New Delhi, revealed that there is a great deal of wastage and stagnation (60%) in primary and middle school levels in India mainly due to economic reasons and the educational backwardness of the parents--apart from truancy, unsuitable curricula, poor teaching, faulty methods of

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[13] Education Commission Report, 1964-1966, p. 288.

examination, etc.

From my experience as teacher-educator, researcher and administrator, the most urgent problems of primary education in India are the extension of compulsory education in all areas and to all children of school age; the supply of an adequate number of qualified teachers; adequate supply of buildings, textbooks, courses of study and teaching curricula to make it relevant to the needs, abilities and environment of the children; keeping the children at school long enough to enable them to acquire permanent functional literacy; finding a solution to the language problem; and educating parents to enable them to reinforce the training the children receive in school instead of putting obstacles in the way of its application.

Secondary Education. Secondary education is sandwiched between the large claims of compulsory primary education on the one hand and the pressing need to produce the leaders of government and industry through an expansion of universal education on the other. Steps are underway to strengthen this weak link because it is considered absolutely vital to the well-being and durability of the entire fabric of education. The secondary schools have to supply properly qualified teachers to run the multitude of fast-springing elementary schools as well as to prepare well-grounded students for the universities.

In 1952-53, the Government of India appointed an all-India Secondary Education Commission to examine the existing system of secondary education in the country and to suggest measures for its reorganization and improvement. The Commission reported the following basic shortcomings and defects in the existing system:

> Firstly, the education given in our schools is isolated from life. Secondly, it is narrow and one sided and

> fails to train the whole personality of the student . . . . Thirdly, until comparatively recently, English was both the medium of instruction and a compulsory subject of study. Fourthly, the methods of teaching generally practiced failed to develop in the students either independence of thought or initiative in action. Fifthly, the increase in the size of classes had considerably reduced personal contacts between teachers and pupils. Finally, the dead weight of the examination had tended to curb the teachers' initiative, to stereotype the curriculum, to promote mechanical and lifeless methods of teaching, to discourage all spirit of experimentation and to place the stress on wrong or unimportant things in education.[14]

The Secondary Education Commission, 1952-53, made the following recommendations:

1. The curriculum should be vitalized by supplementing verbal learning with practical and life-like activities through utilization of community resources and by bringing about a closer relation to community life.
2. More attention should be given to identifying and providing for individual differences through increased personal and vocational guidance.
3. Opportunities should be provided for the students to develop skills in group discussion and practice in planning, researching and arriving at independent judgments.[15]

Independent India has attempted to Indianize and extend secondary schooling. As summarized by Dr. S. N. Mukerji, Indian Educator, these trends are:

1. A strong movement for the diversification of the courses and introduction of vocational bias.
2. Enrichment of the curricula by introducing new subjects, such as civics, crafts and agriculture.
3. Emergence of new types of post-primary schools, viz., the post-basic school and the higher secondary school.
4. Greater emphasis on the regional and the national languages.

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[14] Government of India, Ministry of Education, Report of the Secondary Education Commission (New Delhi, June, 1953), p. 185.

[15] Ibid., p. 112.

5. Increasing recognition of the importance of physical education.[16]

The need for diversification of courses was intensified by the emphasis on expansion. This led to the establishment of a variety of schools--technical schools, industrial training institutes, etc. One important measure in this regard has been the establishment of multi-purpose schools like American comprehensive high schools during the Second and Third Five Year Plans (1956-66). Ten percent of the high/higher secondary schools were converted into multi-purpose schools. They offer diversified courses in three or four streams. These courses at present have a bias in favor of professional courses in the universities and are not job-oriented. Fresh thinking indicates that there should be emphasis on opening various kinds of vocational schools at the secondary level. The Education Commission (1966) has suggested that enrollment at the lower secondary stage in the vocational schools should be raised from the present 2.2% to 20% by 1986 and from 40% to 50% at the higher secondary stage.[17]

The multiplicity of Indian languages (the Constitution has recognized fourteen) is a major problem for secondary education. The trend for several decades has been toward the use of regional vernaculars as the languages of instruction in secondary schools. In no region has the customary language of instruction been English, the language used in the universities.

The Indian solution to the language problem appears gradually to

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[16] S. N. Mukerji, Education in India: Today and Tomorrow (Baroda, India: Acharya Book Depot, 1960), p. 125.

[17] Education Commission Report, 1964-1966, p. 208.

be taking shape, although dissenting opinions are still heard. The use of the mother tongue at the elementary and secondary levels now appears to be well-accepted. Opinions continue to be split on the language of instruction at the university level, with the adoption of a regional language gaining support. These trends would place a heavy but not impossible language burden upon the secondary school students. For students for whom Hindi is not the mother tongue, two additional languages, Hindi and English, would need to be mastered. The former, because it is destined to be the national language, must be mastered by at least those students who extend their education beyond the elementary school and the latter dare not be neglected because of its peculiar historical significance in India and its importance as a vehicle for modern scientific thought.

Sufficient attention was also given to developing higher secondary schools, increasing teachers' salaries and improving their working conditions. The expansion and redesign of Indian secondary education have made heavy demands on the teacher-training institutions. Another subtle problem encountered by Indian secondary schools as they attempt to orient themselves toward the demands of democracy, nationalism and economic development is concerned with the selection of students. Admittedly, in the past the most important single requisite for secondary schooling was wealth, not talent. The cost of attending secondary schools was prohibitive to lower class families. Moreover, the cultural deprivation of the poorer Indian homes, as in other parts of the world, hindered the success of the poor children in the academic requirements. While the problem is well recognized, steps for its cure have only begun. New selection procedures have been developed that will ensure more objectivity in selecting students; and as a

necessarily parallel step, scholarships are being provided for some able but poor students.

The Education Commission (1966) expressed without hesitation that:

> Education science-based and in coherence with Indian culture and values can alone provide the foundation--as also the instrument--for the Nation's progress, security and welfare. Indian education needs a drastic reconstruction, almost a revolution. We need to bring about major improvement in the effectiveness of primary education, to introduce work experience as an integral element of general education; to vocationalize secondary education; to improve the quality of teachers at all levels . . . .[18]

Although education is an item of state control and the central government does not have direct responsibility for education, there has been increasing awareness of the paramount role of the central government, particularly in the promotion of educational research and experimentation, the training of high level educational experts and administrators, the production of better textbooks and instructional materials and, in general, the provision of leadership for the pursuit of excellence in education. It is precisely for these objectives that the National Council of Educational Research and Training (NCERT) was established by the Government of India in 1961 as the professional arm of the Ministry of Education. NCERT has under its control ten departments to improve the various aspects of school education and four regional colleges of education to experiment and to improve teacher education and to provide in-service programs for teachers and administrators. The NCERT and the state institutes of education have heralded a new era in education and they are designed to play a decisive role in determining the future of school education in India.

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[18] Education Commission Report, 1964-1966, p. 1.

Higher Education. The first modern universities in India were established in 1857 at Calcutta, Bombay and Madras and were modeled after the University of London. The function of the universities then, like that of the University of London, was to establish courses of study for the affiliated colleges, examine the candidates prepared by the colleges and grant degrees to the successful candidates. This pattern has been modified in recent years, and most modern Indian universities are either classified as "teaching and affiliating" or "teaching and residential."

The course of study for most of the Indian universities traditionally has been four years beyond high school graduation. At the end of two years there is an intermediate examination. The successful candidate then proceeds for two more years and if successful in his degree examination is awarded the bachelor's degree. Beyond the bachelor's degree, a master's degree is awarded after one or two years of additional study and completion of an examination. In some universities honor graduates--under one arrangement the honor's degree is awarded for three year's study after the intermediate examination--automatically receive their master's degree after the lapse of a prescribed period of time. A Ph.D. degree requires a thesis, but no course work beyond the master's degree. A more definitive report on university education was presented in 1949 by the First Indian University Education Commission. This respected and influential report called upon the universities to prepare educated men and women for the leadership positions required by a modernizing nation. Among the more or less peculiar problems facing Indian universities are those related to the process of synthesizing India's

cultural traditions with the newer knowledge from the West. Indian universities thus far have not been able to integrate past modes of thought with modern European thought to form a new social philosophy that promotes development without forsaking cultural identity. In this regard Kabir points out:

> Even today European, Indian and Islamic philosophies are treated as isolated and self-contained subjects. What is worse, Indian philosophy is often treated as an alternative to Arab thought. A national system of education would require systematic and connected study of the three systems--Indian, Saracenic and European--which have influenced modern Indian consciousness.[19]

The most concrete step taken to remedy this has been the introduction of experimental programs of general education at the university level.

Under the supervision of the University Grants Commission, steps are underway to improve the curricula in all the universities, to bring the content up to date, to provide quality higher education to people in tune with the times so that they in turn can provide leadership in all walks of life.

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[19] H. Kabir, Education in New India (New York: Harper & Row, 1955), p. 114.

CHAPTER III

EDUCATION IN THE UNITED STATES

This chapter is devoted to comprehensive study of education in the United States from historical, philosophical, societal and cultural viewpoints.

Land and People

The land, people and culture of the United States have been elements in a vast acculturation in which the rich inheritance of many of the world's civilizations have found a new synthesis. The continental area of the United States stretches in a wide band across North America from the Atlantic to the Pacific Oceans, with climate ranging from Arctic cold to tropical warmth. The fifty states comprise some 3,615,000 square miles. The American population, a majestic mingling of races and cultures, numbered over 201 million in July, 1968. The United States belongs to a small group of fortune nations whose balance of people and land resources has always been favorable and whose culture benefited from European modernization and technology, science and education without being handicapped by the weight of a feudal or traditional society. This five percent of the world's population produces approximately forty percent of the world's industrial goods. Wyndham Lewis believed that the amalgamation of many ethnic groups in the United States and the inventions of new patterns of living would perhaps provide the beginning of "cosmic man." Americans have their cultural roots in Europe and Asia, in Africa and Latin America, but they have also developed novel and indigenous traits. Three outstanding American

traits are idealism, mobility and productivity. The revolutionary nature of American development and its distinctive national style of life and education have foundations in these traits.[1]

American mobility has been both geographical and cultural. The westward movement of the frontier settlement, the booming growth of cities, the far voyaging of whalers, clippers, jet planes and space rockets, and the automobile-centered tempo of life are aspects of this geographical mobility. Cultural mobility has been demonstrated in the use of universal education as an instrument of self-improvement and social advance. The young could play an important role earlier than the traditional civilizations permitted. Everyone acquires a greater chance to determine his own future. American productivity has involved an unusual combination of scientific experimentation and technological innovation to create an economy of abundance and an affluent society. Such productivity required an acceleration in quantity and quality of education to create the high-level manpower needed for research, management and operation. "The Continuing American Revolution" was based above all upon an evolving idealism, transcendental and utilitarian, which provided a humanitarian orientation. The Christian, Hebraic and Hellenic ethical traditions were carried forward by the Americans in the New World in novel indigenous patterns. The trial of ethical ideals, economic productivity and cultural mobility in the broadest sense were the catalysts in "The Continuing American Revolution."

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[1] Arthur H. Moehlman, Comparative Educational Systems (New York: The Centre for Applied Research in Education, Inc., February, 1968), pp. 75-76.

Historical Development

The history of cultural and educational change in the United States may be divided into three major periods.

1607-1787: A Period of Colonialism. The first permanent European settlements in North America included Jamestown (1607); Plymouth (1620); Massachusetts Bay (1630); Maryland (1632); Connecticut (1635); and Providence Plantations. The motives that prompted most of these settlers to move to America were religious, economic and political in nature. Nearly all educational practices and educational materials in early Colonial America were simply transplanted from the Old World. This period was characterized by a transplanted elite-mass education from Europe with a gradual change around the end of the eighteenth century toward a dawning universal education. The tempo of the times was slow: movement by ox-cart, horse, and canoe was not over seven miles per hour. Family units were almost self-sufficient and the handicraft technology used water, wind, and muscle for power. Schools had a religious base: Episcopal, Congregational, Dutch Reformed or Presbyterian. The apprentice system provided both literacy and training in a craft. The American Revolution was social, economic, and political, creating a new nation free to set a course unchecked by the traditional class structure, political conservatism and economic obstacles of the Old World. Toward the end of the period a distinctly American strategy of education began to take shape. The district or community elementary school developed in New England. The beginnings of the American high school, which was to supersede the Latin grammar school, appeared

in Benjamin Franklin's proposals (1749) for an academy with a realistic curriculum. The American four year arts college developed as a residential college with courses in the classics and natural philosophy and produced such leaders as Jefferson, Madison and John Adams.

Bailyn underlined the fact that education, or the social process of directed learning, is both a mirror and a catalyst: "Education not only reflects and adjusts to society; once formed, it turns back upon it and acts upon it." In the Colonial period, American education was transformed. First, it became an instrument of radical social change, "a powerful internal accelerator" which released the energies of individuals and groups, and gave the young a lead time in new ideas gained from the immediate educational environment away from the control of family elders. Second, American education played a major role in shaping the national character and personality, individualistic, independent, and frontier-like.[2] The United States won its freedom from Colonial control and began its drive toward the dynamics of mass production, an economy of abundance, and equal access to educational opportunities.

From the 1770's, Americans planned, built, changed, argued, and fought over the kinds of free institutions that should replace Colonial rule. One of these institutions was education. As they set up and operated a republican form of government dedicated to equality, democracy and freedom, they found that they needed an educational system appropriate to such a government. James Madison,

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[2] Bernard Bailyn, Education in the Forming of American Society (Chapel Hill, North Carolina: University of North Carolina Press, 1960), pp. 14-48.

Father of the Constitution and author of the Bill of Rights, put it this way:

> A popular Government without popular information or the means of acquiring it, is but a prologue to a farce or tragedy or perhaps both. Knowledge forever governs ignorance; and a people who mean to be their own governors must arm themselves with the power which knowledge gives.[3]

The purpose of general education as Thomas Jefferson wrote was to enable every man to judge for himself what will secure or endanger his freedom. Enunciated in the early years of the Republic, this argument for public education became rooted in the American tradition.

> The creation of an educational system based on the principle of equality of opportunities was even more widely discussed in the U.S. before the end of the eighteenth century.[4]

The War for Independence marked a break in America's cultural as well as political ties with England.

> The educational pattern in the U.S. is distinctive, having evolved from European types and having been adapted to a unique social climate, its distinctive characteristic is its ability to accomodate all classes of individuals and to serve multiple purposes. It operates on the premise that each child has a right to determine his own future calling; and to this end the necessity of making a decision is not forced upon him until he has reached the level of maturity in judgment and understanding necessary to make a wise decision. But it is not assumed that all decisions will be satisfactory. Programs of study, therefore, are kept general in order to permit ready transfer if a mistake is discovered. It is felt that these conditions are possible only in comprehensive institutions, schools that are designed to offer many

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[3] U. S. Office of Education, Expressions by Builders of American Democracy, Bulletin, 1940, No. 10 (Washington, D.C., 1941).

[4] A. O. Hansen, Liberalism and American Education, Education in the Eighteenth Century (New York, 1926).

> programs and to accomodate all individuals of a given age, each with his unique abilities, interests and aspirations. [5]

Many educational leaders from other lands have influenced education in the U.S. These pioneers are Johann Amos Comenius, J. J. Rousseau, J. H. Pestalozzi, J. F. Herbart, F. Froebal and many others. The following Americans--Benjamin Franklin, Henry Barnard, Horace Mann and many others--have contributed to the Americanization of education. The concept of equality influenced not only the political, social and economic spheres of society, but also the educational realm. This concept strengthened the notion that education should be provided for all American youth, that the common school should be free, that it be publicly controlled and supported, that it be nonsectarian and that women have opportunities for education equal with men.

1787-1900: A Period of Educational Awakening and Expansion.

The second or formative period, in the nineteenth century, witnessed the accelerating growth of an indigenous American culture. Gazi and Myers reported:

> The key note of the century of democratic education was "more education for more people." By 1900 the great majority of children aged six to thirteen were in elementary schools; by 1960 over ninety-five percent were in attendance. Universal elementary schooling for all children had been won. By 1900 about ten percent of the children aged fourteen to seventeen were actually in secondary schools; in 1930 more than fifty percent attended and by 1960 nearly ninety percent were attending. This comes close to universal secondary education. In 1760 the average colonist may have had two or three years of schooling; by 1960 the average American had ten to eleven years of schooling. The average years of schooling will probably go to twelve or even to fourteen by 1970. [6]

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[5] I. N. Thut and Don Adams, Educational Patterns in Contemporary Societies (New York: McGraw Hill Book Co., 1964), p. 240.

[6] Kalili Gazi and James E. Myers, Teaching in American Culture (New York: Holt, Rinehart and Winston, Inc., 1968), p. 22.

The fundamental technological shift came with the application of the steam engine to manufacturing, mining and transportation in a system of mass production. The frontiers of settlement first lumbered, then raced westward across the continent with the aid of new power tools and the mass production of the steel plow, wire fence, windmill, repeating rifles, and six-shooters. At the same time, the steam engine was adapted to factory, railroad, and river boats and created great agglomerations of population around merchandising, factory and transport centers. The teachers in the growing system of indigenous universal education helped to weld together many different cultures. An American system of universal education was gradually formed with an eight-year elementary school, a four-year high school and a four-year college or university. Noah Webster helped to build up American education with his "Blueback Speller" and his scholarly and original dictionary. Ralph Waldo Emerson founded the American philosophy of transcendental idealism and led the way toward intellectual independence in his Phi Beta Kappa address of 1837, insisting that Americans break away from their imitation of Europe. Horace Mann led the fight for "universal" rather than "partial" education, i.e., extending education into adolescence beyond the fourteenth year. The Morrill Act of 1862 founded the Land Grant Colleges to meet the demands of agriculture and engineering. The Civil War devastated the South and delayed its economic and educational advance. By the end of this period the modern American university had been developed with its graduate and professional colleges, its laboratories, libraries and research institutes. The universities became a centre for the scientific study of the problems of American civilization and

a major force in its theoretical and actual construction. The pattern of informed education grew rapidly with the coming of the daily newspaper, low-priced periodicals, large-scale book publishing and the foundation of libraries, art galleries and museums.

1900-Contemporary: A Period of Educational Refinement. The third period or period of midpassage in the twentieth century began with another great shift in American life. The frontier of settlement as a line of advance westward had disappeared and the country became increasingly urban and industrial. The United States came of age in literature, the arts, economics, government, technology and education, and found itself involved in international diplomacy as a major force. Technologically speaking, the United States moved into a new industrial revolution characterized not only by new power sources--petroleum, electricity, atomic and solar power--but also by the creation of electronic equivalents to the human nervous system such as automatic computers. Large-scale scientific research linked higher education and industrial, communication, transportation and mercantile organizations together with the Federal Government.

The development of universal education as an instrument in cultural change continued despite two world wars and a major economic depression. G. Stanley Hall, the psychologist, founded the child study movement and emphasized the process of evolutionary growth. William James was a founder of pragmatism and spoke for a pluralistic approach. John Dewey's influence pervaded American education and culture. He reflected the American frontiersman's optimism and democracy and insisted that the school should be part of society linked to life with an activity curriculum. Dewey's

great book, Democracy and Education, refined philosophy as the theory of education in its broadest sense and balanced the value of subject matter areas with the growth and development of the individual.

The American educators pioneered in the world movement toward the expansion of universal education, developing a 6-3-3-4 system of education with elementary, junior and senior high school and higher education. Junior high schools and junior colleges improved the continuity of education. By the close of World War I, the American comprehensive high school assumed its form, putting four general courses of study--academic and college preparatory, technical, vocational and homemaking--under one roof. The growth of the consolidated school making use of school buses enabled country districts to combine single-room, single-teacher schools into larger administrative units so that both elementary and secondary grades benefited from laboratories, workshops and libraries, and better organized curriculum. The Great Depression and World War II involved the United States more and more deeply in the international changes in education through United Nations agencies, UNESCO, and point four plans. Soldiers carried new ideas in their knapsacks from continent to continent and came home to accelerate the extension of universal education into the higher education level under the G.I. Bill. The conflict with totalitarian ideology continued after World War II and forced the United States to re-examine her national style and strategy of education.

This process of historical change resulted in the formation of an educational system with certain basic characteristics. American education is universal throughout elementary, secondary and higher education. The significance of coeducation has been extensive in the

culture pattern and has had constructive results in opening up opportunities for women and educating men more realistically and aesthetically. The American comprehensive high school produces both amateurs and experts, giving a general education to all, but recognizing that each individual has particular talents which must be identified and sought out.

The Americans made systematic improvements in libraries through the Dewey Decimal System and the general development of library science. Extensive work has been done in the audio-visual field including 16mm safety films, overhead projectors, and the use of radio and television as effective and dynamic extensions of instruction. Teaching machines of various types were devised by Skinner and others and hold promise of creating an educational technology which will enable the individual student to progress at his own speed. The Americans have developed statistically-controlled, standardized tests and have used them extensively.

Problems in American Education

Community Responsibility for Education. Each of the fifty states controls its own system of education instead of being directed by a central ministry. There is local community responsibility through school boards made up of elected citizens.

> Since the U.S. is composed of fifty states, one must speak not of the "American School System," but rather of fifty school systems. Although all of the states are organized into some form of local school districts, these districts differ according to local conditions and the cultural and historical backgrounds of the states. State school laws list as many as sixty different names for school districts

> and authorities have classified them under seventeen different headings.[7]

Although there has been a constant decrease in the number of school districts in the country due to consolidations, there were still approximately 20,440 during 1969-70.

The American Association of School Administrators, recognizing the importance of local-state-Federal relations, enacted the following resolution in its 1966 convention:

> The Association believes in a multi-level system of education in America. Excellence in education is tied to a strong state department of education and a strong local district--each working in a constructive, harmonious relationship with the other, yet each fulfilling a unique role. There is no more important task confronting the public schools of America than coordinating the educational policies and programs of the local, state and Federal Governments to provide appropriate comprehensive programs to serve the educational needs of all Americans.

The nation is in great need of more clarification of authority over education and better cooperation between bodies at the local, state and national levels of government.

However, federal influence upon education has been extensive including the Morrill Act of 1862 and the Smith-Hughes Act of 1917. The U.S. Office of Education has made noteworthy contributions to the advancement of the educational system. Students learn democratic living in schools which are the miniatures of the democratic society of the nation. Toward this end a pattern of extracurricular activities has been developed including student government, varsity and intramural sports, bands, orchestras, choruses, and dramatic and debating societies. The system of public education is secular since church

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[7] Walter S. Monroe, Encyclopedia of Educational Research (New York: Macmillan & Co., 1950), p. 1083.

and state are separated in the United States. The American strategy of education has evolved into a slowly accelerated general education which specializes gradually and relatively late on the collegiate or higher education level. Controversies have been vigorous concerning the balance between "life adjustment" and "subject-matter-centered" curricula, liberal education and professionalization, federal and state control of education. The United States has had to cope with the problems of adequate education for minority groups, segregation, attempts to secure federal financial support for sectarian schools, and educational inequalities among various states.

Philosophical Foundations.

> One of the most interesting and significant chronicles in American history is that of the development of education in this country. Our system of free universal schools is one of the most unique and significant characteristics of our society. It is unique because free public education for all is a bold and visionary ideal without precedent in the history of man-kind. It is significant because the story of our national strength and prosperity is, in large measure, the story of our schools. Truly, the development of our educational system is one of the noblest and most distinguishing expressions of American civilization.[8]

Edmund J. King describes modern "Americanization" beautifully as follows:

> The whole philosophical foundation of the American republic is one of European liberalism nourished in an atmosphere of free growth, free experiment and tolerance for others. The "great experiment" of all time has been the building of a nursery for individual human enterprise amidst abundance--not in conditions of uniformity or automatism but in conditions that assure the basic minimums of social justice and economic sufficiency. As a matter of principle rather than of actual practice, these "inalienable rights" are the very heart of American education in schools, in homes, in public life. It is American

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[8] Chris A. DeYoung and Richard Wynn, American Education (6th ed.; New York: McGraw Hill Book Co., 1968), p. 39.

> insistence on equality without identity, on differences that can be complementary, on accepting qualities as right if they can justify themselves pragmatically, that have differentiated the American way from pure intellectualism in the past and from Soviet-style standardization in the present.[9]

Professor Lawrence Cremin, an educational historian, spoke of this nation's powerful faith in education:

> As one reviews the American experience, nothing is more striking than the boundless faith of the citizenry in the power of popular education. It was a faith widely shared by the generation that founded the Republic, and it has been an essential article of American belief ever since. Indeed one literally cannot understand American history apart from it, so often Americans have expressed their political aspirations in educational terms. Education has been par excellence, America's instrument of social progress and reform.[10]

As Cremin points out, America's concern for popular education is older than the Republic itself.

A publication entitled American Education and Search for Equal Opportunity states:

> From the belief in the equal dignity of all men, a demand for equal opportunity for all men logically follows, and American history is in major part a story of the search for it . . . . For some Americans, however, barriers to personal advancement have never fallen. The children of migrant farm labourers, mountain whites, Negroes, Puerto Ricans, American Indians or Mexican Americans have not had the same chances for personal progress as have most American children. By and large, they have been disadvantaged by subcultures which did not attune them to the demands and opportunities of modern life. By and large, they have been further disadvantaged by the lack of respect in which other Americans have tended

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[9] Edmund J. King, Other Schools and Ours - A Comparative Study for Today (3rd ed.; New York: Holt, Rinehart and Winston, Inc., 1967), p. 211.

[10] Lawrence A. Cremin, The Genius of American Education (Pittsburgh: University of Pittsburgh Press, 1965), p. 119.

> to hold them and their ways of life. Finally, they have been disadvantaged by the poverty arising out of both causes.[11]

The year 1964 was a significant one in federal legislation, marking the enactment of the Economic Opportunity Act (War on Poverty) and the Civil Rights Act. In 1965 these were followed by precedent-breaking federal legislation in the passage of the Elementary and Secondary Education Act and in 1966 by the revised Civil Rights Act. These federal laws are legal milestones on the path of progress toward providing equality of opportunity and education.

The characteristic form of educational organization everywhere except in the U.S. has been the dual system--elementary education for the masses and secondary education for the few. People who live differently think differently wrote Professor Laski. Hence the culture pattern of different nations differs, even though the form of government and the political ideals may be the same in all. The public education system of the U.S. from elementary school to the university is strengthened by private education providing essential opportunities for experimentation and variety.

Pre-elementary Education. The pre-elementary period includes pre-natal and post-natal care as well as the early nurture and education of the child. The principal agencies for providing care and education at this early level are the home, the nursery school and

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[11] American Association of School Administrators, American Education and Equal Opportunity (Washington, D.C.: National Education Association, 1965), pp. 1-2.

the kindergarten as well as Head Start Programs. This period reaches up to the elementary school age of approximately six years. Pre-elementary education relates to the very important early years of child growth and development, covering the period from birth to entry into elementary education. The pioneering work in pre-elementary education dates back to Froebel. Although there were a few prototypes of pre-elementary schools in early America, the movement really did not gain momentum until after World War I. It is rapidly becoming widely established.

Pre-elementary education begins with the preparation of parents for child rearing and with the care and training of the young child in the home. In many ways, these are the most important years in life because they include the period of most rapid growth. These are very formative years and children are influenced greatly by the quality of their home life. Day nurseries and nursery schools exist in many forms--sometimes operated privately, sometimes integrated with the public school program, sometimes associated with high schools or colleges as laboratories. However, most nursery schools are separated from other educational units and are operated by private agencies. Head Start Programs, supported by the Economic Opportunity Act, have generated a strong thrust toward the development of pre-elementary programs and have demonstrated the powerful impact that such programs have upon the growth of young children, particularly those from low income families.

Nursery schools were originated to care for the children of working mothers. But today nursery school education seeks to bring organization, planning and guidance to the growth and development of children during their formative years. These programs are very

informal for supervised play, story-telling and discussion, singing, dancing and other similar activities. Nursery schools aim to smooth the young child's difficult transition from the family setting to the school environment. They provide an opportunity for children to adjust to larger groups before the more formidable tasks of kindergarten and first grade are encountered.

The kindergarten also exists in both the public and private domain. However, a larger proportion of kindergartens than nursery schools are affiliated with public school systems. Nevertheless, large numbers of young children, particularly those in small school systems, are still denied kindergarten experience. The kindergarten seeks to guide the mental, social, emotional and physical development of the child. Thus, his experience with people and with the world is broadened so that more effective learning can take place in later years.

In the future, further expansion of pre-elementary education is most probable. The gradual acceptance of this type of education as a legitimate and permanent part of the local-state-Federal program seems inevitable.

Elementary Education. Elementary education lays the firm foundation for the all-around growth of the child through developing in him basic skills, attitudes and knowledge. The elementary schools in the U.S. enroll almost one-sixth of all Americans and are the main instruments for equipping persons with a common and general education. The modern elementary school, although distinctly of American character, has been influenced by European traditions. Comenius, Rousseau, Pestalozzi, Herbart, Mann, Barnard, Parker, Dewey

and Kilpatrick have made particularly important contributions to the development of elementary education. Enrollments have nearly doubled in the past half century, making elementary schooling virtually universal in America.

The Educational Policies Commission extolled the importance of the free, compulsory elementary school:

> The unique importance of the elementary school lies in the universality and intensity of its influence. Virtually all Americans attend this school and at a period when the school can make a larger difference in their lives than at any later time . . . . Universal education has been most nearly achieved at the elementary school level. Of all the educational institutions, the elementary school reaches the greatest number of Americans for the longest time. It is therefore a corner stone of the American promise of equal opportunity.[12]

Elementary schools provide basic learning for all children. They seek to stimulate mental, physical, social, emotional, aesthetic and moral development as well as understanding of the world and its people, communication skills, and quantitative relationships. The general goals of elementary schooling emerge from the broad values of American democracy. There is much variety among elementary schools in terms of programs, organization, philosophy, size and control. There are public and private schools; large, medium-sized and small schools; traditional and progressive schools; and schools organized by grades, subjects, student activities and other factors. Elementary education in general is more progressive and experimental than other levels of education.

The elementary school is presently adopting a variety of new

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[12] Educational Policies Commission, Contemporary Issues in Elementary Education (Washington, D.C.: National Education Association, 1960).

procedures, largely in the direction of increased flexibility and democracy. Curricula are being reorganized and extended to provide better integration of subject matter and enriched learning. Increased emphasis is being given to mathematics, science, and languages. Greater effort is being made to adapt learning experiences to the individual abilities and needs of the students. Grouping of children according to their ability and the elimination of grade classifications are growing trends in this direction. Increased attention is being given also to the needs of the gifted and handicapped children. The middle school is emerging as a hopefully better arrangement for meeting the needs of children in the upper elementary years.

Elementary school buildings have become more flexible and functional, as well as more creative in design. Instructional materials are more plentiful, attractive and effective. Television and other media of the new instructional technology are being used more widely and more effectively. Standards of preparation and in-service development of teachers have been strengthened. The problem currently facing the elementary schools with the increase in enrollment is how to provide quality education.

Secondary Education. Secondary education is broadened and lengthened to include all the curricular and co-curricular activities of the pre-adolescent, adolescent, and post-adolescent youth. Theoretically, it spans the period covering the junior high school and the senior high school. It adds to the general education of the youth and often provides some degree of specialization. Eighty-five percent of the youth of high school age are in school.

Secondary education reaches a larger proportion of youth in the U.S. than in any other country. Federal aid programs, such as the Economic Opportunity Act of 1964 and the Elementary and Secondary Education Act of 1965, are helping to increase high school attendance and to reduce the number of dropouts. The median number of years of schooling completed by adults over twenty-five years of age is now twelve, approximately equivalent to high school graduation.

> The comprehensive high school is a peculiarly American phenomenon. It is called comprehensive because it offers, under one administration and under one roof (or series of roofs), secondary education for almost all the high school age children of one town or neighborhood. It is responsible for educating the boy who will be an atomic scientist and the girl who will marry at eighteen; the prospective captain of a ship and the future captain of industry. It is responsible for educating the bright and the not so bright children with different vocational and professional ambitions and with various motivations. It is responsible in sum for providing good and appropriate education, both academic and vocational, for all young people within a democratic environment which the American people believe serves the principles they cherish.[13]

An elective system, as contrasted to a selective system, became characteristic of American schools. The significant events in the evolution of secondary education are: (1) the Latin Grammar School, (2) the tuition academy, (3) the free public high school and (4) the extended secondary school. Secondary education serves many purposes. It provides general education for all, prepares gifted students for college and provides practical preparation for the problems of life that will confront those who do not attend college. Several classic statements have been made on the purposes of secondary education. The recent AASA statement, imperatives in education, has

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[13] James B. Conant, The Comprehensive High School (New York: McGraw-Hill Book Company, 1967), p. 3.

many implications for this area of American education.

There are many types of secondary schools, among them the general, comprehensive and vocational-technical four-year high school; the three-year senior high and the three- or two-year junior high; the technical post-elementary school; and in between elementary and secondary education, the newly developing middle school. One in ten secondary school students is enrolled in a private high school. The majority of private high schools are parochial schools. Non-public secondary schools are often leaders in educational innovations. Secondary education is characterized by numerous and significant innovations in (1) organization and administration, (2) curricula and teaching-learning procedures, and (3) personnel practices. For example, the number of men teachers in secondary education now exceeds women teachers. Modern secondary education is currently undergoing a critical examination. It is teeming with changes and the future passage of many more. A feature of the secondary school has been and remains its ability to change and serve as a catalyst in producing further innovations in American education.

The period of secondary education with its emphasis on general education for all and on special preparation for practical life for those who will not go beyond secondary school is followed by the period of higher learning which offers a wide variety of opportunities for continuing institutionalized education.

Higher Education. C. P. Snow, the eminent British author and scientist, spoke thus of his envy of American colleges and his admiration for them:

> You were the first people in the world to bring higher education to an enormous slice of an enormous

> country and to remove it from the privilege of a small elite . . . . I have no doubt whatever that college education over the whole width and breadth of America is one of the real achievements of this world . . . .[14]

There are twenty-three hundred colleges and universities in this nation. They range from tiny colleges with less than one hundred students to vast universities with sprawling campuses; from tax supported junior colleges with low tuition to quite expensive private schools; from colleges that are wealthy to those that are poverty stricken; and from colleges specializing in technical fields to universities offering vast programs in general education as well as many technical and professional fields. These are the institutions that have brought "higher education to an enormous slice of an enormous country." The universities in the United States have from the beginning engaged in a pursuit of ultimate truth in every field of knowledge and the impact of university thinking has had a far-reaching effect in every aspect of the American civilization, as Merle Curti has demonstrated in his admirable book The Growth of American Thought. The strength of American universal education lies in its balance of unity and diversity; and as James Bryant Conant puts it, "equality of opportunity for all youth, equality of respect for all honest citizens" as goals for American education.[15]

Higher education in the U.S. had its antecedents in European universities, but the character of colleges and universities is

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[14] C. P. Snow, "Higher Education in America," NEA Journal, LI (April, 1964), p. 11.

[15] J. B. Conant, The Citadel of Learning (New Haven: Yale University Press, 1956), pp. 23 ff.

distinctly American. In some respects, the system of higher education is the envy of the world. Liberal arts colleges, public universities and community colleges are largely indigenous in this country. The U.S. pioneered in the democratization of higher education through its land-grant colleges in the last century and through its public community colleges and public universities in this century. Both are built on the concept of low-cost education for the many. Thus the U.S. has been able to provide higher education for a larger proportion of its youth through the years than any other nation. The trend in college attendance presently is sharply in the direction of community colleges, other public colleges and universities and urban universities.

The sharp rise in college attendance has been phenomenal. It has doubled during the past decade and will continue to increase not only because of the general rise in population, but also because an increased proportion of youth are continuing their education in both undergraduate and graduate school. Some of the U.S. universities have reached almost a phenomenal size, which is the root of some of their problems.

Higher education is presently characterized by a number of interesting trends: greater cooperation between institutions, some reduction of differences among various institutions, an increased use of instructional technology, a greater use of independent study, more abundant financial help for students, less rigid and compartmentalized curriculum, less concentration upon general education and more upon professional and preprofessional preparation, more attention to international and intercultural education, a rise in

the power of students, higher faculty salaries in response to the continuing shortage of professors and vastly increased financial support from the Federal Government.

Higher education's paramount problems include the tenuous future of the liberal arts college, the preservation of quality in the face of shortages of everything but students, the growing tension between students and administrations, the further expansion of higher educational opportunity to disadvantaged minority groups, skyrocketing tuition costs and the race between the curriculum and the explosion of knowledge. Overall, the outlook is one of cautious optimism.

CHAPTER IV

CURRICULUM, FINANCING, PREPARATION OF TEACHERS AND ORGANIZATION OF EDUCATION IN INDIA

Chapter IV deals with four aspects of school education in India. They are: Curriculum, Financing, Preparation of Teachers and Organization of Education.

Curriculum

The educational program for the school consists of the formal curriculum and cocurricular activities. The curriculum includes all the experiences that pupils have under the guidance of the schools. The modern curriculum is developed cooperatively by academicians, educationists, administrators and teachers. The objectives of the curriculum are determined by the needs of the pupils and the needs of society. Society in turn is influenced by the nature of the school curriculum. One of the most fruitful ways of understanding a society is to study the curriculum of its schools. An examination of Indian schools aids in developing an understanding of the culture.

The structure of education in India differs from state to state. Broadly speaking, the school course extends over ten to twelve years. Existing and proposed nomenclatures for various stages of education in India[1] are cited in the Appendices (II). The various levels of school education in India are classified as primary, lower secondary or middle school and higher secondary. Coeducation is generally not the rule in India, but this is gaining in popularity.

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[1] See Appendix II, pp. 91-92.

Description of School Curriculum. The educational program at the elementary stage in India consists of reading and writing of the regional language which is the mother tongue, history, geography, arithmetic and science in the form of nature study. Indian junior or middle school provides experiences in such fields as art, music, homemaking and industrial arts as well as in academic subjects. One important measure at the secondary level has been the establishment of multi-purpose schools--distinctly Indian--during 1956-1966 to provide diversified education according to diversified interests, aptitudes and abilities of the pupils. Due to a paucity of funds, very few high schools were converted into multi-purpose schools to offer diversified courses in three or four streams to serve as terminal education. These courses at present have a bias in favour of professional courses in the universities and are not job-oriented. Secondary education in India consists of a certain number of core subjects common to all students, namely (1) Languages, (2) General Science, (3) Social Studies and (4) a Craft; and at least two diversified courses of study from the following seven groups: (1) Humanities, (2) Sciences, (3) Technical Subjects, (4) Commercial Subjects, (5) Agricultural Subjects, (6) Fine Arts and (7) Home Sciences.

The school curriculum in India appears to be very narrowly conceived, largely out of date and mechanically administered. Education is a threefold process of imparting knowledge, developing skills and inculcating proper interests, attitudes and values. Indian schools are mostly concerned with the first part of the process--the imparting of knowledge. The curriculum places a premium on bookish knowledge, and rote learning makes inadequate provision for practical activities and experiences. The system is dominated by examinations,

external and internal. Moreover, as the development of useful skills and the inculcation of the right kind of interests, attitudes and values are not given sufficient emphasis, the curriculum becomes not only out of step with modern knowledge, but also out of tune with the life of the people. The curricula are prepared at the state level and are prescribed for all the schools in the state. No freedom is allowed teachers and head teachers for experimentation with new curricula.

Innovations and Trends in School Curriculum. After India attained independence, attempts were made to weed out the dead matter in curriculum, deepen its content, and relate it to national and social goals. There was also a simultaneous attempt to improve its teaching. Now efforts are made by the Department of Curriculum and Evaluation, National Council of Educational Research and Training (NCERT), New Delhi, in collaboration with various state departments of education to improve the school curriculum and to develop curriculum on the basis of research and experimentation.

The first effective revolt against the traditional curriculum was an attempt to change the basic system of education and make it distinctly Indian. This was to become the national pattern at the elementary level by the state governments. The essential elements of this system are now seen as productive activity in education, correlation of the curriculum with the productive activity and the physical and social environment of the child, and intimate contact between the school and the local community. Gandhi, the father of the nation, believed that life is a unity and knowledge comes to a child through life experience as a unity. This approach got moral

strength through the development of a similar concept of teaching social studies and general science in America. Courses of study in history, geography, economics, civics were fused together and were called social studies. Similar courses in physics, chemistry and biology were fused together and called general science. All books were rewritten and the teacher-training institutions began to advocate this integrated approach. Teachers and others felt that the method does not enable the student to learn subject matter in each of these disciplines adequately, that learning leaves big gaps and that it does not help the formulation of clear thought by the child. A revision of views, therefore, is taking place. The various departments of the National Council of Educational Research and Training are conducting experiments in the teaching of science, and in social studies in some schools with a view to teaching them as distinct subjects and not as general science and social studies. They are also helping some schools to enrich the prescribed syllabi and experiment with new ideas.

The need to upgrade and improve school curriculum has led the central and state governments to initiate a number of activities. One important feature is the development of new textbooks. The National Council of Educational Research and Training is providing leadership in producing model textbooks and curriculum guides in various subjects taught in primary and secondary schools. The major activity of the National Council is the publication of educational literature such as textbooks, journals, yearbooks, research monographs, etc. The National Council has also undertaken reprints of good foreign textbooks. The P.S.S.C. (Physical Sciences Study Committee),

CH.E.M. (Chemistry Education Material Study), B.S.C.S. (Biological Sciences Curriculum Committee) and S.M.S.G. (School Mathematics Study Group) materials from America exemplify the type of books that are imported.

The recommendations of the Education Commission (1966) for reorganizing the school curriculum and enriching its content envisage a common curriculum of general education for the first ten years of secondary school education and diversification and specialization beginning at the two-year upper secondary stage. One of the important features of the proposed program of curriculum reform is the emphasis on the teaching of science and mathematics in schools. Features of a few new ideas in operation for this purpose are:

a) Preparation of improved syllabi and instructional materials.

b) Improvement in training programs and the training of the key personnel.

c) Development of simple science kits and preparation of science equipment.

A few subjects in the new curriculum are:

1. Languages

A study of three languages is compulsory at the elementary level. The languages are: the mother tongue or regional language, the national language (Hindi) and the international language--preferably English. In the case of those whose mother tongue is Hindi, they have to learn one of the South Indian languages. Though the study of three languages at the elementary stage interferes considerably with the development of the child's mastery over his mother tongue and with his intellectual growth, there is no other way but to accept a heavier language load because of the

multiplicity of languages and hundreds of dialects in India. In a few selected schools, provision is made to teach German, French and other foreign languages, so that students can have a choice of European languages. In no case is it prescribed that the language burden should exceed more than four languages.

2. Study of Sciences

Great emphasis is placed on making science an important element in the school curriculum. There is more emphasis on the deductive approach or the use of the scientific method. The changing character of science is the major factor in curriculum development. The conceptual framework of physics has undergone a drastic change, and this is reflected in the school physics curriculum. In chemistry, its application to industry and daily life are very much emphasized. The concept of biology as a method of inquiry by means of accurate and confirmable observations, quantitatively and mathematically analyzed, and controlled experimentation are very much stressed.

3. Study of Mathematics

Mathematics assumes a prominent position in modern curriculum. Apart from its role in the growth of physical sciences, it is now playing an increasingly important part in the development of biological sciences. At the primary stage mathematics is at present divided into arithmetic, algebra and geometry. At the secondary level traditional mathematics curriculum is revitalized and brought up to date by using the school mathematics study group series.

4. Social Studies and Social Sciences

More emphasis is placed on the idea of national unity and the unity of mankind throughout the school course with due regard, of course, to the pupil's age and understanding.

5. Co-curricular Activities

Certain activities such as hobbies of different kinds, debates, dramas, games and sports which have more of the quality of play than work and which give greater opportunities for self-expression are provided in Indian schools.

Evaluation. There is urgent need to raise, upgrade and improve the school curriculum in India. The overall need is that general education requires strengthening in the areas of science, work experience, moral and spiritual values. High priority must be given to vocationalization of secondary education.

Financing

The progress of civilization depends fundamentally on developing human resources. Basically, this development is determined by the extent and quality of education that is provided. Human resource development is the result of the distribution and utilization of knowledge, and the utilization of skills of all the people in a society. To deny the educational system the resources to reach ever-growing numbers of students and/or to improve its quality is to starve society. Schools are part of the community in which they are located. They serve the educational needs of the community and in turn draw support and strength from the community.

Public education in India is a matter of federal interest and a state function. There is keen competition for tax money in India between central, state, and local agencies. India is wedded to democracy and believes in an educated populace.

Sources of Income. There are remarkable differences between

states in India and the extent to which the various sources contribute to expenditure. Due to various historical reasons, a multi-source finance system has grown in India and education is now financed by the central government, state governments (71.2%) and local authorities (6.3%), and through fees (15.3%) and other sources (7.2%) which include endowments, donations and other voluntary contributions from the public (See Appendix IV). This has helped to raise more resources than would otherwise have been possible and has also shown a certain resilience in terms of difficulties by setting off, to some extent, the pitfalls of depending upon one source. Table I (See Appendix IV) shows how the contribution of each source has increased during the first three plans with the growth and complexity of educational activity.

During 1965-1966, India spent 2.9 percent from its Gross National Product (GNP) of Rs 210,000 millions for education.[2] This trend shows that expenditures may increase in the years ahead to achieve both a higher quality and a greater quantity of education. During 1965-1966, per capita income in India was Rs 425 and per capita education expenditure was Rs 12.1.

Trends in School Financing. The expenditures for education are increasing sharply for a number of reasons: increasing school enrollments, longer attendance at schools, increased scope and quality of education, rising costs of services and materials, and capital requirements for the educational program and others. Future increases in school expenditures are inevitable. It will be seen from Table I

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[2] Education Commission Report, 1964-1966, p. 473.

(See Appendix III) that the responsibility for financing of education at all levels is falling increasingly on government funds (central and state). This trend may increase in the future. Since India is not in a position to meet the financial obligations of universal compulsory education, it is expected that under basic education the schools will, to a small extent, be able to pay a part of the total recurring expenses out of income from the sale of articles made by the pupils.

Evaluation. The problems of financing education in India can be tackled only on the basis of an approach which meets India's special situation. The complexity of Indian problems and the necessity of connecting education with life, particularly productivity, have to be identified and solutions worked out which take care of the special needs of the country.

Preparation of Teachers

Among the persons who exert an abiding influence upon the child is the teacher. Teaching is becoming more of a profession. Standards for selection, as well as pre-service and in-service education, are being introduced. The great shortage of well-qualified teachers constitutes a threat to the welfare of the nation. No economy is so short-sighted as that which employs unqualified personnel in education. The population explosion, the discovery of the hydrogen bomb, the rapid advance of technology and a growing host of problems involving socio-cultural relations have brought into sharp focus a re-examination of teacher education. Foundational to the program of instruction of any school is the excellence of the school's faculty.

Teacher Certification and Teacher Education Programs. A license, certificate or permit to teach in the elementary and secondary schools is required in all states in India. It has been accepted that the quality of education depends upon the quality of teachers. The minimum qualification of a teacher in primary school is normally a middle school education with two years of professional training, but now in most of the states the minimum qualification for appointment has been raised to high school graduation with two years' training. The minimum qualification of a teacher in secondary school is normally university graduation or post-graduate study with one year of professional training or four years of college level preparation which can be taken in the four regional colleges of education established on the lines of colleges of education in America. Requirements like an oath of allegiance, a certificate of good health and a statement of recommendation of the candidate for certification by his college or employing officer is also needed.

Many states in India are trying to improve certification practices, but certain factors such as a backlog of untrained teachers, both at primary and secondary levels, paucity of funds and qualified staff in teacher-training colleges are mainly responsible for slow movement. Teacher certification standards, required for school personnel in India, are brought out by the Ministry of Education with the help of states from time to time.

A sound program of professional education of teachers is essential for the qualitative improvement of education. The Report of the Education Commission (1966) pointed out that existing programs of teacher education are largely traditional, rigid and divorced

from the realities of schools; and it has been suggested that the following broad principles should be attempted for this reorganization:

----reorientation of subject knowledge;

----vitalization of professional studies;

----improvement in methods of teaching and evaluation;

----improvement of student teaching;

----development of special courses and programs; and

----revision and improvement of curricula.[3]

The curriculum for the professional education of primary teachers is now divided into two parts. The theoretical portion includes principles of education, child development or child psychology, methods of teaching, school organization and health education, and the practical work including crafts, practice-teaching and activities of community living. The curriculum for the professional education of secondary teachers comprises a study of: philosophical, psychological and sociological foundations, school organization, methods of teaching, practice-teaching and practical work.

Improvement of Teacher Education. Urgent attention is being paid to improving the quality of teachers both at the primary and the secondary levels. The syllabus of the primary teacher-training institutions has been revised by an Expert Committee headed by Dr. S. N. Mukerji. The National Council of Educational Research and Training (NCERT) has distributed this revised syllabus to the primary training institutions and state governments so that they may modify their training programs. There is a large backlog of untrained teachers teaching in the primary and secondary schools in the

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[3]Education Commission Report, 1964-1966, p. 72.

country. The National Council of Educational Research and Training has started summer school and correspondence courses for secondary school teachers at the Central Institute of Education and the Regional Colleges of Education at Ajmer, Bhopal, Bhubaneswar and Mysore.

A very large number of teachers are untrained both at the primary and secondary levels. There are nearly 1800 teacher-training institutions in the country but it is considered that this large backlog of teachers cannot be trained through the normal channel with the existing training institutions. Emergency measures are, therefore, planned to clear this backlog. The National Council of Educational Research and Training has already introduced a summer school program in its regional colleges. Efforts are being made to increase the enrollment to 400 in each regional college.

The Ministry of Education proposed to establish more correspondence centers for clearing the backlog of untrained secondary school teachers. A similar scheme has been formulated by the Ministry of Education for the training of primary school teachers. With the financial assistance from the Government of India, it is proposed that the State Institutes of Education in various states will organize correspondence courses for untrained primary school teachers.

Measures are also being suggested to improve the academic, financial and social position of teachers and teacher educators. It is proposed that the minimum academic and professional qualifications of teacher educators be upgraded. The isolation of teacher-training institutions from universities and schools is also being removed by effective measures. The establishment of some comprehensive teacher-training institutions is also under active consideration. Through comprehensive training colleges, it is proposed to provide

for the training of secondary and primary teachers on the same campus.

In-Service Education of Teachers. In-service education of teachers in India has been accepted as one of the important measures for promoting their professional growth. Due to the explosion of knowledge in content as well as in pedagogy, continuous efforts are needed to keep the teachers abreast of new developments. Over a period of ten years starting in 1955, 145 Extension Centers have been established in primary and secondary teacher-training institutions all over the country. The purpose of opening these Extension Centers was to enable the training institutions to help the schools in their all-around improvement and to provide for the continuous professional growth of teachers. The National Council of Educational Research and Training, the Department of Field Services and the Department of Basic Education are responsible for the Extension Centers. The Council provides 100 percent of the expenditures for these centers, and academic guidance is provided by the experts working in the National Council of Educational Research and Training. The work of these centers has had considerable impact on primary and secondary schools in the country. Therefore, the Education Commission (1966) has recommended that Extension Centers should be provided in all the 1800 primary and secondary teacher-training institutions. The Indian Association of Teacher Educators also has advised the Government of India to allocate an adequate amount of money for opening an Extension Center in every teacher-training institution. To increase the number of Extension Centers from 145 to 1800 would require a considerable amount of money. But it is expected that the program would be gradually expanded and it would be possible to provide an Extension

Center to every training institution in the next 15 years.

Accreditation of Programs. The Indian Association of Teacher Educators (IATE) functions not merely to validate accreditation but also to improve teacher education in collaboration with the Department of Teacher Education, National Council of Educational Research and Training, New Delhi.

Evaluation. A program of highest importance is to improve the quality of teacher education and to upgrade the qualifications of teachers at all levels. In-service education for teachers must be strengthened and facilities must be provided for teachers to improve their qualifications. To attract the competent people to the teaching profession, pay scales and other conditions must be improved on a par with other professions. The total program of teacher education at all levels needs to be organized in the spirit of community enterprise.

Organization of Education

Sir Graham Balfour described the central task of the educational administrator as:

> To enable the right pupils to receive the right education from the right teachers, at a cost within the means of the State, under conditions which will enable the pupils best to profit by their training.[4]

The plan for the organization and administration of education in any nation is closely related to its political theory. The educational system of India reflects the precepts of democracy. Education in a

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[4] I. L. Kandel, The New Era in Education-A Comparative Study (New York: Houghton Mifflin Company, 1955), p. 92.

democracy functions to develop individuals to their fullest capacity so that they in turn may contribute to the achievement of the ideals of a democratic society. An effective democratic form of government is dependent upon a well-educated citizenry.

Present Organizational Pattern. The organizational pattern of education is examined with particular attention given to the newly developing roles of the federal, state and local governments in the educational enterprise.

India is an example of a decentralized system of administrative control. This is so because its social philosophy calls for the policy-making and policy-executing functions to be located as closely as possible to the people. The decentralized arrangements, particularly evident in the administration of public education, make it possible for those individuals who are directly concerned to participate in the decision-making process. Relatively little financial support for public education comes from the central government. States and local communities enjoy status and autonomy. Decentralization of administrative authority indicates the presence of a social philosophy that attributes dignity to all individuals with differing values. Such commitments understandably have produced unique forms of educational administration and control.

Public education in India is a matter of federal or central interest and states' concern. It is further decentralized in many of the states by associating local bodies. In each of the states, an elected Minister is in charge of the portfolio of education. The Secretary, Department of Education, is Head of the Department and the Director of Public Instruction/Director of Education is the executive

Head and acts as an expert advisor to the Minister of Education. The Director controls the inspecting and teaching staffs of all schools--both government and recognized private schools. In a number of states, there are in addition, several officers working under the Directors of Public Instruction, who carry out special projects dealing with social education, basic education, vocational education, etc.

The administration of universal primary education in a big country such as India is a task of very great magnitude and complexity. It has two aspects--one of universalizing primary education as laid down under Article 45 of the Indian Constitution and thus making the nation literate, and the other of improving the quality of this minimum education to enable every child who receives the benefit of primary education to be a responsible citizen. These two sides of the administration of primary education have created a number of problems for administrators, each one being a complex task in itself. Universality of provision of primary schools, universality of enrollment and universality of retention are the three vital problems and at the same time very difficult aspects of universal, compulsory primary education. Article 40 of the Indian Constitution provided that "the State shall take steps to organize village panchayats (local units) and endow them with such powers and authority as may be necessary to enable them to function as units of self-government." Acting on this directive, the states have enacted panchayat acts and delegated certain powers to them in the field of primary education. This important trend marks a new direction in the administration of primary education in India. The measures of democratic decentralization would result in larger and closer association of local bodies at

different levels with the administration of not only primary education but with a number of educational programs such as social education. It is envisaged that decentralization of executive powers to local bodies will be accompanied by centralization of finance in the government and adequate grants in aid to local bodies. The local community would also be motivated to make voluntary contributions to the school fund of the local body. The powers of guidance, inspection and control will be continued to be exercised by the state. A great future seems to be in store for local bodies in India under the democratic decentralization set-up.

The main function of the Ministry of Education in India is to take the initiative in discussing problems with state governments, devising remedies and framing policies, guiding, conducting research through its various professional organs and to coordinate educational activities between states which are then translated into action by the state governments and local education authorities.

Evolving System. It is widely believed that in India the federal government should continue to exercise certain educational functions without interfering in states or local systems of education. A national system of education is widely discussed to associate local bodies with education.

Evaluation. The organization of education at all levels needs well-qualified and well-trained personnel in educational administration. In the absence of training facilities, there is great need today to establish training institutions for administrators at state and national levels. State governments and the central government must take interest and initiative to provide qualified people to give leadership.

CHAPTER V

CURRICULUM, FINANCING, PREPARATION OF TEACHERS AND ORGANIZATION OF EDUCATION IN THE UNITED STATES

Chapter V deals with four aspects of school education in the United States. They are: Curriculum, Financing, Preparation of Teachers and Organization of Education.

Curriculum

The structure of education in America differs from state to state. Broadly speaking, the school course extends from kindergarten through the 12th grade. The various levels of school education in America are elementary school (kindergarten-6th grade), junior high school (7th-9th grades), and senior high school (10th-12th grades). Coeducation is generally the rule in the United States.

Description of School Curriculum. The educational program at the elementary stage in America consists of Reading, Language Arts, Social Science, Mathematics, Science, and sometimes Foreign Languages such as Spanish and French, and the Fine Arts. American junior high schools provide a variety of exploratory educational experiences in such fields as art, music, homemaking, and industrial arts as well as in the academic subjects which help the student to elect courses more confidently in later years. The American comprehensive high school provides diversified educational experiences according to diversified interests, aptitudes and abilities of pupils. American secondary school programs consist of English (Language Arts), Social Studies, Mathematics, Science, Health and Physical Education. A large number of elective courses are offered such as Industrial Arts, Foreign Languages, Music, Art, Vocational Education, etc. from which

students choose according to their interests, abilities and aptitudes. The comprehensive school strives to meet the needs of practically all youth of secondary school age through its parallel curricula--college preparatory, general, vocational, and commercial--all of which include some common courses in general studies.

The traditional American school curriculum had been radically transformed under the impact of progressive education. The content of courses is now being challenged by several scholars and university men, and a new reform movement has been started which may bring in sweeping curricular changes in education. This wide-spread dissatisfaction with the curriculum is due to many causes. In the first place, the tremendous explosion of knowledge in recent years and the reformulation of the basic concepts in the physical, biological and social sciences has brought into sharp focus the inadequacies of existing school programs. The gulf between the public schools and the university in the major academic disciplines which was always wide has become wider still with the rapid advance of science. Secondly, there has been a rethinking in educational circles about the nature and duration of the education that is imparted in ordinary secondary school. Expert opinion now generally favours the lengthening of the period of general education and the postponement of specialized study to a later period in secondary school. Again, with the necessity of including more and more significant items in an already overpacked school curriculum, it is realized that there is a good deal of useless educational lumber in the school courses which can be safely discarded and that more dynamic and stimulating methods can be developed for presenting essential knowledge. All these factors are responsible for the increasing pressures for reform of school curriculum.

Innovations and Trends in School Curriculum. The new curriculum reform of the late 1950's and 1960's was concentrated essentially at the high school level first but spread quickly to the elementary, pre-elementary and higher education levels. Since the new curriculum reform was subject-discipline-centered in the United States, it cannot be understood fully without considering each subject.

1. Language Arts

The student who is unable to read well is sorely handicapped in all other learning. In many elementary schools the basic language skills--reading, handwriting, spelling, grammar and listening--are no longer taught as separate subjects, but are fused into a language arts core curriculum. Creative writing, study of literature, language games and other devices are displacing the traditional abstract, dull rote learning of grammar. In recent years, the science of linguistics has been applied more systematically to the teaching of the language skills at all levels of instruction. Thus the student's language understanding is being developed through both inductive and deductive reasoning. Three central components of the language arts curriculum are recognized: language, literature and composition. Increasing emphasis is being given to the latter two, which have been neglected in more traditional curricula.

2. Social Studies

Curriculum improvement in the social studies has been less dramatic than that in the fields of mathematics, science and foreign languages in spite of the fact that mankind's most compelling problems--world peace, race relations, international understanding, hunger, urbanization and labour-management relations--look to the social rather

than to the physical sciences for solution. New concepts from the fields of sociology, economics, world affairs, cultural anthropology and the behavioural sciences have often failed to find their way into the social studies curriculum of the high school.

3. Natural Sciences

Another component of the curriculum that has changed drastically in recent years, partly through the stimulus of the National Defense Education Act and the National Science Foundation, is the natural sciences. Elementary school science, once restricted largely to nature study, now stresses the identification and solution of simple scientific problems, exposure to the method of scientific inquiry and the performance of simple experiments. More advanced concepts are taught earlier and the various branches of the physical sciences are often fused at the elementary level.

The major transformation of the science curriculum is taking place at the high school level. As with mathematics, subject matter has been brought up to date and moved downward by grade levels. Shadowing concepts of science, the logical structure of scientific knowledge and the unity and interrelationship of the branches of science are being stressed. The science curricula are becoming more unified, better-coordinated and more sequential. Science is being fused with other fields such as health and safety education.

The new physics curriculum includes the study of thermodynamics, solid state physics, nucleonics, radioactive isotopes, reactors, nuclear energy, quantum theory, aerospace science, rocketry, and principles of propulsion. The modern biology curriculum places greater emphasis upon molecular and cellular biology rather than classical biology. Greater use is being made of laboratory work.

In chemistry, too, the new approach emphasizes the interrelationship of knowledge in chemistry through the concept of chemical bonds. Even in the ninth grade, the general science course has taken on greater academic respectability with the inclusion of introductory work in the space sciences, astronomy, meteorology and other fields.

The study of science is now regarded as an integral part of general education. In most schools it is no longer an elective field of specialization only for those who need it for advanced work, but rather a required part of the education of all students growing up in a world of scientific revolution.

Sex education is a special type of education that merits particular mention. Many educators regard the fifth grade as the ideal time to commence sex education because students in this pre-puberty stage still have the frank and objective curiosity of children, as well as the readiness and interest to sustain such study. Many excellent textbooks on sex education are available at various grade levels including kindergarten.

4. Mathematics

A veritable revolution, stimulated in part by the National Defense Education Act, has taken place in the arithmetic and mathematics curricula of the nation's schools. Many advanced concepts are now introduced quite early. Number sets, which form the primary basis for the new mathematics, are introduced as early as the fourth grade. Emphasis is placed upon deductive thinking and symbolic logic, which pupils use as tools in learning and in organizing knowledge. A sense of discovery of mathematical principles and generalizations is evoked. Young children reportedly learn and enjoy fairly difficult abstract ideas that help them see the overall structure of mathematics.

At the high school level, the ninth grade general mathematics course has been replaced by more advanced work in algebra. In the senior high school, the old compartmentalization of courses is broken down; algebra, geometry and trigonometry are fused. Some of the old content, such as solid geometry and logarithms, is eliminated or reduced and replaced by the study of probabilities, statistics, functions and matrices along with Boolean algebra and binary number systems, the language of the automatic computer. In some schools, students are given the opportunity to work with computers. Four-year course sequences are more commonly required of capable high school students. Some advanced high school students master calculus and other college level subjects. The main emphasis of the new mathematics is its stress upon the unity and the structure of the science; a systematic, logical organization of mathematical concepts, its utilization of self-discovery of principles and relationships and its employment of symbolic logic and deductive thinking. First used experimentally in several schools, the new mathematics has been revised and presented in new series of mathematics textbooks ranging from the fourth grade through the high school years. Institutes and workshops, supported by the National Science Foundation, have been held to retrain thousands of teachers who generally like the new method and materials.

5. Foreign Languages

Development of foreign language curricula has been stimulated by the National Defense Education Act and by the work of the Modern Language Association. Spanish and French are the languages most commonly offered, frequently as early as the third grade and in a few schools in kindergarten. FLES, Foreign Languages in the Elementary

School, is the name commonly given to this educational movement. Foreign languages, long the sole province of secondary and higher education, have been moved to the lower grade levels, where they have been taught in European schools for years. Most instruction in the elementary school is at the conversational level only, with mastery of reading and writing deferred to the secondary years. Many educators are still uncertain of the value of foreign language instruction at the elementary level.

In response to the nation's increasing responsibilities around the world and its desire for deeper international understanding, foreign language study at the secondary level is booming. A wider range of languages is available in most high schools--Spanish, French, German, Italian, and Russian are offered in that order of frequency. A few high schools and many colleges are teaching the languages of the non-western world, notably Arabic and Chinese. It was discovered that conversational command of a language could be gained quickly through the use of tape recordings of the speech of foreign linguists speaking in their native tongues. Modern foreign language instruction is placing more emphasis upon the science of linguistics. Attention is being given to language as a form of communication and as a means of understanding other cultures. The emergence from schools of more Americans with four and even eight or a ten-year background of study of one or more languages promises to make this nation more capable of dealing intelligently with other peoples of the world in governmental, business, educational and cultural exchanges.

6. The Arts

In America, music and fine arts have for a long time been treated as step-children of the curriculum. Although most high schools offer

courses in music and art, they are usually elective and often fail to reach the vast majority of students.

One of the most promising developments in education in the arts has been the trend toward the fusion of instruction in the arts and other humanities. The strengthening of curriculum development and instructional method in the arts and other humanities is being stimulated by several agencies. The recent creation of the arts and humanities branch of the United States Office of Education has helped to bring new vitality to education in these important areas. More than $\$\frac{1}{2}$ million is being appropriated to schools under the NDEA for programs in the arts and humanities which are interpreted broadly to include music, dance, drama, folk art, creative writing, architecture, painting, sculpture, photography, graphic and craft arts, industrial design, costume and fashion design, motion pictures, television, language, linguistics, literature, history, jurisprudence, philosophy, archaeology and other related fields.

7. Health and Physical Education

The importance of good health for children has been recognized in schools, and the American Association for Health, Physical Education and Recreation, an affiliate of the National Education Association is attempting to improve the scope and quality of health and physical education in the schools through conferences of teachers, research studies and a wide variety of publications.

8. Cocurricular Activities

School curriculum is conceived as the totality of learning experience that the school provides for the pupils through all the manifold activities in the school or outside that are carried on under its

supervision. American schools provide a large number of diversified activities, such as student council activities, club programs, community-related activities and performing activities such as the football team, the school band, the debating club, and the school science fair.

The direction of the new curriculum is toward the identification of fundamental principles and broad concepts and toward the development of a sense of the unity and general structure of the knowledge in the subject discipline. Teachers encourage the student to learn how to learn by helping him to understand the subject in a way that permits other information to be related to it meaningfully.

The curriculum is being viewed as a continuing sequence from the kindergarten through the graduate school. Continuity is the key word. Logical sequence of content through many grade levels rather than separate layers of unrelated content is being sought. Educators are attempting to work with individual differences by ability grouping and with multi-track systems that send students of varying ability along the curricular routes best suited to their rate of learning and their interests. The curriculum designers still look to the behavioural sciences for an understanding of the pupil, which is one of the determinants of curricular structure. The emphasis at one time was the search for levels of readiness which indicated the grades below which advanced subject matter should not be taught.

Extensive and increasing use is being made of the new instructional media--television, tapes, programmed textbooks, teaching machines, computers and learning laboratories--at all levels of the educational system, but especially in high schools. Throughout the curriculum

more time and encouragement are given to independent study. Teaching machines, language laboratories and other self-instructional devices have helped to facilitate the drive toward do-it-yourself education, and it is hoped that this academic self-sufficiency will carry over throughout life. The new curriculum development enterprises have commonly recognized the importance of the teacher in the implementation of courses.

Evaluation. A majority of the school administrators (See Appendix I) expressed that:

1. School curriculum is overloaded at all levels.
2. Reading is the number one problem at the junior high school level.
3. More vocational courses should be provided at the junior high school level.

Financing

The progress of civilization depends fundamentally on developing human resources. It is interesting to note that the Rockefeller Brothers Fund has reported, "All the problems of the schools lead us back sooner or later to one basic problem--financing."[1]

Perhaps the most basic question to raise with respect to school finance is whether or not the amount of money spent has any effect upon the quality of education. Norton, who has reviewed the research evidence carefully, concludes that:

> Higher quality education is generally provided in school systems which spend larger amounts per pupil and

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[1] Rockefeller Brothers Fund, The Pursuit of Excellence: Education and the Future of America, Panel Report V of the Special Studies Project (New York: Doubleday & Company, Inc., 1958), p. 38.

> lower quality education in school systems spending smaller amounts per pupil. This conclusion is overwhelmingly supported by available factual studies of the cost-quality relationship.[2]

Although money is clearly the most important single determinant of the quality education, it is not the only factor. Generating appropriate economic bases for the support of public education requires a value judgment which can be made only by American society. Equalization of education opportunity and burden is the golden rule of educational finance. Expenditures for education are not a cost--they represent a long term investment for which the people should be willing and hopefully able to pay.

Public education in America is a matter of Federal interest, a state function and a local operation. There is keen competition for tax dollars in the United States among Federal, state and local governments in investing money in education. America is wedded to democracy and believes in an educated populace. The American people have been especially concerned about the provisions for control of school finance because they recognize that the agency that controls finance also controls the educational program.

Sources of Income. Education in early America was supported largely by private funds. As education became universal and compulsory, it came to be more public in its support and control. Revenue receipts for public school purposes may be classified on the following bases: revenue from local sources, taxation and appropriation, tuition from patrons, transportation fees, other revenue from local sources, revenue from intermediate sources, revenue from state sources

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[2]John K. Norton, Dimensions in School Finance (Washington, D.C.: National Education Association, 1966), pp. 38-39.

and revenue from federal sources. Non-revenue receipts for schools include sale of bonds, loans, sale of school property, insurance adjustments, and income transfer accounts. During 1968-69, 52% of school funds came from local sources, 40.7% from state sources and 7.3% from federal sources.[3] Local property tax revenue based on the value of property, real estate and personal, continues to carry the main burden for new school revenue. The proportions of local and state support for education vary widely among the states. Most states allocate aid to the districts on the basis of need, providing larger sums for poor districts. This is known as equalization aid, since it guarantees a minimum foundation of expenditures for each district, regardless of its wealth and at the same time provides financial levy and incentive to local districts to exceed the foundation level.

The expenditures for education have increased sharply for a number of reasons in America: increased school enrollments, longer attendance at schools, increased scope and quality of education, rising costs of services and materials, and the capital requirements for the educational program and others. Future increases in school expenditures are inevitable. The magnitude of the American education establishment is given in Appendix IV. During 1968-69, the United States spent 7 percent from its Gross National Product (GNP) of $894.3 billions for education. United States current expenditures per pupil during 1968-69 average daily attendance in public elementary and secondary schools was $681. During 1969-70 national income per capita in the

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[3] National Education Association, Research Division, Estimates of School Statistics, 1968-69 (Washington, D.C., 1968), p. 16.

United States was $3400.[4]

Trends in School Financing. The striking trend in American educational finance has been the increased participation of the federal government. The federal, state and local partnership concept that should be evolving on a sound basis is seriously jeopardized by categorical grants with restrictions rather than general aids.

Evaluation. Most respondents (See Appendix I) revealed that federal and state aid on a large scale without restrictions will enable them to provide quality education in their schools.

Preparation of Teachers

The population explosion, the discovery of the hydrogen bomb, the rapid advance of technology and a growing host of problems involving socio-cultural relations have brought into sharp focus a re-examination of the teacher education. Foundational to the program of instruction of any school is the excellence of the school's faculty.

Teacher Certification and Teacher Education Programs. Teacher certification has been generally defined as the legal evidence of competence or as the legal authorization to receive public funds in payment for teaching. The major purposes of teacher certification drawn, of course, from the definition are to protect children from the unqualified, to safeguard public funds, and to protect the competent

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[4] Ibid., p. 20.

practitioner against the unfair competition of the substandard or unqualified teachers. Kinney (1964) distinguished between licensure and certification as:

> The former, he holds, is evidence of admission to the teaching profession. Legal licensure, in his view, is a civil service procedure, the purpose of which is to control employment and remuneration. According to this view, certification should be the prerogative of professional associations and would, in fact, be based upon evidence of competence and would be a prerequisite to legal licensure.[5]

A license, certificate or permit to teach in the elementary and secondary schools is required in all states in America. It has been accepted in America that the quality of education depends upon the quality of teachers. Four years of college level preparation is required by all the states in America for certification of secondary school teachers and by all but three states for certification of elementary school teachers. Requirements such as an oath of allegiance, a certificate of good health and a statement of recommendation of the candidate for certification by his college or employing officer are adopted in America.

Many states in America are moving toward improved certification practices such as:

1. Elimination of substandard emergency certificates.
2. Four years of approved teacher preparation with a Bachelor's Degree as a minimum and with a fifth year as soon as possible.
3. A minimum of 15 semester hours of professional work, including student teaching.
4. A probationary period of not less than three years under professional guidance.

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[5] Lucien B. Kinney, Certification in Education (New York: Prentice-Hall, 1964), p. 178.

5. Discontinuance of permanent or life certificates.

6. Centralization of general certification in a state agency.

7. Reciprocity between states in certifying qualified teachers.

8. Greater emphasis on qualitative competencies and professional growth.

9. Increasing responsibility for teacher education institutions through an approved program approach to accreditation and certification.

10. More simplicity and less specificity in certification requirements.[6]

The National Commission of Teacher Education and Professional Standards, a division of the National Education Association, seeks to help states strengthen their teacher certification standards and publishes periodically a manual on certification requirements for school personnel in the United States.

Major Curricular Beliefs. The National Council for Accreditation of Teacher Education prepared a working statement entitled "The Teacher Education Curriculum." It contains the following major beliefs regarding college preparation for teachers: The curriculum for teacher education should be attractive to capable students who seek a good basic education for themselves and adequate preparation for a professional career. The statement also includes the following major convictions:

1. All teachers should be well-educated persons.

2. The curriculum should produce an area of subject matter concentration for each teacher.

3. Teachers should have specific preparation for their specific responsibilities.

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[6]C. A. DeYoung and Richard Wynn, American Education (New York: McGraw-Hill Book Company, Sixth Edition, 1968), p. 301.

4. The curriculum should include well-organized program of professional work, including laboratory experiences.[7]

These beliefs are usually implemented through curricular programs in at least three areas--general education, specialization and professional education. The teacher is an interpreter of the general culture; hence, his preparation must include general education. He also teaches some special subject or generalized field; hence, he needs subject matter or field preparation. He works with young people; hence, he takes professional work in education and psychology including student teaching.

Improvement of Teacher Education. There is substantial evidence of dramatic improvement in the American teacher's professional qualifications, even during the period of acute teacher shortage. Between 1950 and 1968, the proportion of elementary school teachers with four years of college preparation rose phenomenally from 50 to almost 90 percent. Although the total number of well-prepared elementary school teachers is still inadequate, it is most heartening to see this remarkable rise in the level of formal preparation. At the secondary level, less than two percent of the teachers have had less than four years of college level education. The public school teacher without a college degree is rapidly disappearing. Nearly all states now require the Bachelor's Degree for teacher certification. Approximately one-third of all public elementary and secondary school teachers hold the Master's Degree and the proportion is constantly rising. This steady improvement of the nation's teaching force, even during

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[7] Ibid., pp. 297-298.

periods of rapid growth in school enrollment and manpower shortages, is clearly one of the most heartening signs of the wholesomeness of the American education system.

In-Service Education of Teachers. In the United States, the National Society for the Study of Education, which devoted one of its yearbooks to in-service education, stated that this continuing education of teachers includes all activities engaged in by professional personnel during their service and designed to contribute to improvement on the job. The following purposes are given for in-service education:

1. To promote the continuous improvement of the total professional staff of the school system.
2. To eliminate the deficiencies in the background preparation of teachers and other professional workers.
3. To give much needed help to teachers who are new in the particular school and to those who are entering a new responsibility or a new field of work in the profession.[8]

Accreditation of Programs. The National Council for Accreditation of Teacher Education, organized in 1954, was recognized in 1956 by the National Commission on Accreditation "as the sole national agency for accreditation of teacher education." This Council (NCATE) is autonomous with regard to the policies and procedures it follows. It is not a branch of any organization. Its purposes are not merely accreditation but improvement of teacher education

Evaluation. Most of the administrators (See Appendix I) confirmed their satisfaction with the present teacher education programs.

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[8] National Society for the Study of Education, Inservice Education (Chicago: University of Chicago Press, 1957), p. 13.

However, they felt particular attention must be paid in preparing men teachers to teach core classes and in preparing teachers for inner city areas.

Organization of Education

The principles upon which the organization and administration of education should be based were well-defined at the beginning of the nineteenth century. Of these the first was a strong faith in education and the ideal of equality of educational opportunities. The second principle arose from the widespread opinion that the studies provided by the Latin Grammar Schools and liberal arts colleges were themselves "aristocratic" or "monarchical" and helped to perpetuate class distinction. The third principle was that new types of studies must be introduced to meet the conditions of new times and a new government.

Present Organizational Pattern. The organizational pattern of education in America is examined with particular attention given to the newly developing roles of the federal, state and local governments in the educational enterprise.

The United States provides an example of a decentralized system of administrative control. This is so because its social philosophy calls for the policy-making and policy-executing functions to be located as closely as possible to the people. The decentralized arrangements, particularly evident in the administration of public education, make it possible for those individuals who are directly concerned to participate in the decision-making process. Relatively speaking, a little financial support for public education comes from

federal sources in America. States and local communities enjoy a status and autonomy. Decentralization of administrative authority indicates the presence of a social philosophy that attributes dignity to all individuals and values, their active participation in the decision-making functions of government and other aspects of their common life. Such commitments understandably have produced unique forms of educational administration and control.

No people in the world have held the idea of educational opportunity for all the children of all the people more strongly than the Americans. The American public education has its local application in the school district which is usually administered by an elected board of education and an appointed superintendent of schools. The local school district is a striking example of grass-roots democracy. Laymen are important leaders in education in both public and private institutions. Education is regarded as the vehicle for the preservation of democracy, the improvement of society, the economic well-being of the people and the strengthening of morality. The federal government has a strong interest in education as it relates to national security, national domestic problems and the rights and dignity of individual citizens as expressed in the American Constitution. The pattern of decentralization of control of education is commensurate with a democratic form of government. In a government by the people, the local level decision-making permits initiative, encourages reponsibility and allows for adaptations to unique community needs. The complexities of American society are causing a careful re-examination of the traditional roles of local, state and federal government in education. It is quite likely that new patterns of governmental

interrelationships as they apply to education will emerge from this tripartite.

Evolving System. It is widely believed that in the United States the federal government should continue to exercise certain educational functions without controlling states or local systems of education and that these functions should include primarily financial support, leadership and stimulation. Several proposals have been advanced for improving national provisions for education. A national system of education may be evolving gradually in America.

Evaluation. By and large, the majority of the administrators (See Appendix I) cited the following as problems in organization:

1. Militancy of teachers and students.
2. Lack of proper initiative and coordination from the management.
3. Preparation of statistical reports and printing report cards of students.
4. Categorical federal aid with restrictions.

CHAPTER VI

COMPARATIVE ANALYSIS

Chapter VI is devoted to conclusions developed from the comparison.

India is mainly an agricultural country whereas the United States is highly industrialized. The population of India is 565 million (1969) as compared to an American population of 201 million (July, 1968). Indian mobility is less when compared to high American mobility. Indians speak fourteen main languages and hundreds of dialects compared to the one language, English, spoken in America. English is spoken by a minority in India whereas in the United States it is the primary language spoken. A large majority of the Indians belong to the Hindu religion. Most of the Americans belong to the Christian religion.

Indian civilization is ancient compared to modern American civilization. Many educational leaders from other lands have influenced education in the United States while such impact is less in the case of India. The Caste System is the major divisive force in India whereas color and socio-economic class are the divisive forces in America.

Both India and the United States were under the British colonial rule. The former became independent in 1947 and the latter achieved freedom as early as 1776. Both are democratic countries, but their ways of approaching the accomplishment of goals are somewhat different. Both countries have mixed economies, but emphasis varies. In both of the countries, education is under the control of state governments. In the United States public or local participation is practiced, while in India it is more discussed. Federal

participation in both of the countries is increasing in the form of cash and kind.

Both India and the United States believe that an educated populace is the basis for a sound democracy. Due to economic backwardness and overpopulation, India is struggling to provide universal primary education for all, whereas the United States could accomplish the target of providing universal primary and secondary education for all by its highly developed, self-propelling economy. The diversity between inter- and intra-state educational systems is broad in America as compared to India. In spite of diversity, there is unity and understanding between the states in both of the countries.

Pre-primary education in India is a neglected field, but in America special attention is being given toward the improvement of this area. Indian primary (basic) education and American elementary education have their uniqueness and have their roots in their respective lands. The diversified courses offered in Indian multi-purpose schools have a bias in favour of professional courses in the universities and are not job-oriented such as the varied diversified courses in American comprehensive schools. Higher education in the United States is highly specialized as compared to the higher education of India.

By and large, school curriculum in India needs drastic changes at all levels when compared to modern American school curriculum. Diversification of courses is more talked about in India whereas in America it is in practice. The scope for experimentation and innovation is less in Indian schools than in American schools. Indian school curriculum, at all levels, is more static when compared to the flexible and changing American curriculum. Curriculum improvement

in different areas has just recently begun in India, but America has reached its peak in reorganizing the curriculum. Too many languages in India pose a burden to Indian students. The teacher in India has less freedom than the American teacher in experimenting with new ideas. Extensive use of the new instructional media such as television and teaching machines is new to the teachers in India. Greater emphasis is being placed upon the results of external and internal examinations in India whereas in America greater use is being made of standardized achievement and intelligence tests. A few selected and less expensive co-curricular activities are provided in Indian schools as compared to the variety of costly activities in American schools.

Public education in India is a matter of federal interest, a state function and operation, but in America it is a matter of federal interest, a state function and mainly a local operation. Just as the American public schools are fighting for tax dollars in a land of plenty, the Indian schools are fighting for tax rupees in a severely overpopulated land. A multi-source finance system is in existence in India as compared to a federal, state and local partnership in America. There is keen competition in both of the countries for tax money among different levels of government. The United States national income per capita is $3400.00 whereas the Indian income per capita is $80.00. This has its reflections in per capita education expenditures.

Teacher certification standards are low in India when compared to America. The minimum qualification of a primary teacher in India is high school graduation with two years of training whereas in America university graduation is necessary. Minimum qualifications prescribed

for the secondary teachers are the same in both of the countries. More facilities are available to teachers in America in order for them to improve their qualifications as compared to their counterparts in India. In general, the American teachers are well-qualified as compared to Indian teachers. The administration of universal primary education in a big country such as India is a task of very great magnitude and complexity when compared to America.

Names of Schools Visited and Persons Interviewed

Sr. No.	Date of Visit	Name and Address of the School	Persons Interviewed
1	Dec. 8, 1969	Bancroft Junior High 2724 Riverview Blvd. Omaha, Nebraska 68108	Mr. Paul J. Malcom, Principal
2	Jan. 29, 1970	Washington Elementary 5519 Mayberry, Omaha	Mrs. Dorothy Hall, Principal
3	Mar. 4, 1970	Missouri Valley Community School, Missouri Valley Iowa 51555	Mr. Arnold L. Bradley, Superintendent
4	Mar. 6, 1970	Benson High School 5119 Maple St., Omaha	Dr. Howard R. Sorensen, Principal Dr. Donald W. Ruby, Vice-principal Mr. Milton A. Lorenz, Head Counselor
5	Mar. 10, 1970	Monroe Junior High School 5105 Bedford Ave. Omaha, Nebraska 68104	Mr. Jack E. Hallstrom, Principal Mr. Bridenbaugh, Vice-principal
6	Mar. 18, 1970	Cross Lutheran Ele. School 1828 Van Camp Avenue Omaha, Nebraska	Mr. Lance Lee, Principal
7	Mar. 21, 1970	Horace Mann Jr. High School, 3720 Florence Boulevard, Omaha, Nebr.	Mr. Clarence Barbee, Principal
8	Apr. 11, 1970	Burke High School 12200 Burke Omaha, Nebraska	Dr. Robert Brown, Principal

Sr. No.	Date of Visit	Name and Address of the School	Persons Interviewed
9	May 9, 1970	Cody Elementary West-wood Lane Millard, Nebraska	Mr. Don Stroh, Superintendent
10	May 23, 1970	Cathedral High School 3915 Burt, Omaha	Sister Ursula, Principal

Appendix II

EXISTING AND PROPOSED NOMENCLATURES
FOR VARIOUS STAGES OF EDUCATION

Nomenclatures Proposed	Existing Nomenclatures
SCHOOL EDUCATION	
1. Pre-primary	1. Pre-primary 2. Pre-basic 3. Kindergarten 4. Montessori, etc.
2. Primary (Classes I-VII or I-VIII)	
(a) Lower Primary Classes I-IV or I-V	1. Primary in some States (e.g. Punjab) 2. Lower Primary in some States (e.g. Gujarat) 3. Junior Basic 4. Lower Elementary in some States (e.g. Madras)
(b) Higher Primary Classes V-VII or VI-VIII	1. Middle in some States (e.g. Punjab) 2. Junior High School (e.g. U.P.) 3. Upper Primary in some States (e.g. Gujarat) 4. Senior Basic 5. Higher Elementary in some States (e.g. Madras)
3. Secondary Classes VIII-XII or IX-XII	High School; Higher Secondary School
(a) Lower Secondary Education Classes VIII-X or IX-X	High School
(b) Higher Secondary Education Classes XI-XII	This will include Class XI or PUC in some States (e.g. Rajasthan). It will include Junior Colleges in Kerala. It will include Intermediate Classes in Uttar Pradesh. It will also include terms like pre-professional, pre-medical and pre-engineering.

Nomenclatures Proposed	Existing Nomenclatures
	HIGHER EDUCATION
4. Professional Degrees	All degrees which lead to a professional qualification (e.g. M.A.; M.Sc.; M.Com.; B.E.; M.B.; B.S.; B.T.; LL.B.; B.Ag.; etc.)
5. General Degrees	All degrees other than professional ones.
6. Undergraduate	All courses leading to the first degree.
7. Postgraduate	All courses beyond the first degree (excluding certain first degrees given after the first degree e.g. B.Ed.).
	GENERAL
First Level of Education	This will include pre-school and primary education.
Second Level of Education	This will include high school and higher secondary education.
Third Level of Education	This will include undergraduate and post-graduate education and research.

Source: Education Commission Report, 1964-1966, p. 45.

Appendix III

TABLE I

EDUCATIONAL EXPENDITURE IN INDIA BY SOURCES
(1950-51 to 1960-66)

Source	1950-51	1955-56	1960-61	1965-66 estimated
1. Government Funds				
(i) Total expenditure (Rs. in 000's)	652,678	1,172,049	2,340,914	4,271,856
(ii) Index of growth	100	179	359	655
(iii) Percentage of total expenditure on education	57.1	61.8	68.0	71.2
2. Local Authorities' Funds				
(i) Total expenditure (Rs. in 000's)	124,987	163,548	224,914	378,031
(ii) Index of growth	100	131	180	302
(iii) Percentage of total expenditure on education	10.9	8.6	6.5	6.3
3. Fees				
(i) Total expenditure (Rs. in 000's)	233,272	379,033	590,258	918,077
(ii) Index of growth	100	162	253	394
(iii) Percentage of total expenditure on education	20.4	20.0	17.1	15.3
4. Other Sources				
(i) Total expenditure (Rs. in 000's)	132,885	181,980	287,715	432,036
(ii) Index of growth	100	137	217	325
(iii) Percentage of total expenditure on education	11.6	9.6	8.4	7.2
5. Average Annual Rate of Growth	First Plan	Second Plan	Third Plan	All Three Plans
(i) Government funds	12.4	14.8	12.8	13.3
(ii) Local authorities' funds	5.5	6.6	10.9	7.3
(iii) Fees	10.3	9.2	9.2	9.6
(iv) Other sources	6.5	9.6	8.5	8.1

Source: Education Commission Report, 1964-1966, p. 471.

THE MAGNITUDE OF THE AMERICAN EDUCATION ESTABLISHMENT (1969-70)

More than sixty-one million Americans are engaged fulltime as students, teachers, or administrators in the nation's educational enterprise. Another 132,000 make education a time-consuming avocation as trustees of local systems, state boards of education, or institutions of higher learning. The breakdown is given here:

Institutions	
Elementary	88,556
Secondary	31,203
Universities, Colleges and Junior Colleges	2,483
Total	122,242
School Districts	20,440
Students	
Pupils in Elementary Schools (Kindergarten through eighth grade)	
Public schools	32,600,000
Non-public (Private and Parochial)	4,300,000
Total	36,900,000
Secondary School Students	
Public High Schools	13,200,000
Non-public	1,400,000
Total	14,600,000
College and University part-time students enrolled for credit toward degrees	
Public Institutions	5,100,000
Non-public	2,000,000
Total	7,100,000
Total Students Enrolled	58,600,000
Teachers	
Elementary School Teachers	
Public	1,099,000
Non-public	152,000
Secondary Schools	
Public	904,000
Non-public	88,000
College and University Teachers	
Public	344,000
Non-public	188,000
Total	2,775,000
Administrators and Supervisors	
Superintendents of Schools	13,106
Principals and Supervisors	119,365
College and University Presidents	2,483
Other College Administrative and Service Staff	82,000
Total	216,954
Board Members	
Local School Board Members	106,806
State Board Members	500
College and University Trustees	25,000
Total	132,306
Cost (in billions)	
Current Expenditures and Interest	
Elementary Schools	
Public	$32.7
Non-public	3.8
Higher	
Public	12.0
Non-public	7.7
Capital Outlay	
Elementary and Secondary Schools	
Public	$ 4.9
Non-public	0.6
Higher	
Public	2.6
Non-public	0.4
Total	$64.7

Figures are based on latest available estimates from the U.S. Office of Education and the National Education Association, October 18, 1969.

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